# **EXHIBIT H**

Page 1

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY

POWER SURVEY, LLC., Plaintiff,

v.

Civil Action No.

PREMIER UTILITY SERVICES, 2:13-cv-05670-

LLC., and L-3 COMMUNICATIONS FSH-MAH

CORPORATION d/b/a/ NARDA

SAFETY TEST SOLUTIONS

Defendants.

VIDEOTAPED DEPOSITION OF DAVID KALOKITIS

Friday, April 18, 2014 Washington, D.C.

Reported by: Lori J. Goodin, RPR, CLR, CRR

1		Page 2		Page 4
2   9-32 a.m.   2   3   For Premier Unity Services LLC:   4   JURA C. ZIBAS, ISQUIRE   1/15 the offices of:   5   JURA C. ZIBAS, ISQUIRE   1/15 the offices of:   1/15 the offices of	1	-	1 1	,
3	l	-	l	18121888920 0011111032
S	3		3	For Premier Utility Services LLC:
VIDEOTAPED DEPOSITION OF DAVID KALOKITIS, held at the offices of.   150 East 42nd Street   160 New York Avenee, Northwest   9	4		4	
7	5	VIDEOTAPED DEPOSITION OF DAVID KALOKITIS, held at	5	
Sterne Kessler Goldstein Fox   9   Juna zibas@witsondser.com   110 New York Avenue, Northwest   9   Juna zibas@witsondser.com   10   11   12   12   12   13   13   14   15   15   15   15   16   16   16   16	6		6	150 East 42nd Street
9	7		7	New York, New York 10017
10	8	Sterne Kessler Goldstein Fox	8	212-490-3000
11   12   12   12   13   14   15   15   16   16   16   16   16   16	9	1100 New York Avenue, Northwest	9	jura.zibas@wilsonelser.com
12	10	Washington, D.C. 20005	10	
13	11		11	
14	12		12	ALSO PRESENT:
15   LiveNote Reporter, Certified Realtime Reporter, and Notary Public in and for the District of 16   16   17   18   18   19   19   19   19   19   19	13	pursuant to notice before Lori J. Goodin,	13	Michael Gay, CLVS
16   and Notary Public in and for the District of Columbia.	14	Registered Professional Reporter, Certified	14	
17	15	LiveNote Reporter, Certified Realtime Reporter,	15	
18	16	and Notary Public in and for the District of	16	
19	17	Columbia.	17	
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7         STERNE KESSLER GOLDSTEIN FOX         7         EXHIBITS           8         1100 New York Avenue, Northwest         8         KALOKITIS           9         Washington, D.C. 20005         9         EXHIBIT NO. DESCRIPTION         PAGE           10         202-371-2600         10         1         Declaration of D. Kalokitis 49           11         mevens@skgf.com         11         in support of motion for           12         mray@skgf.com         12         Preliminary injunction           13         12         Dr. Fugate's Declaration, 106           14         Pages 1-10         Pages 1-10           15         For Defendant Narda:         15         3         Provisional Patent         113           16         DANIEL J. GOETTLE, ESQUIRE         16         Application Serial Number           17         BAKERHOSTETLER         17         60/639054           18         2929 Arch Street         18         4         Provisional Patent         124           19         Cira Centre, 12th Floor         19         Application Serial Number           20         Philadelphia, Pennsylvania 19104         20         60/641470           21         215-568-3100         21         5         Provis	5	MICHAEL B. RAY, ESQUIRE	5	Ms. Zibas 229
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mevens@skgf.com 12 mray@skgf.com 13 ndesai@skgf.com 14 pages 1-10 15 For Defendant Narda: 16 DANIEL J. GOETTLE, ESQUIRE 17 BAKERHOSTETLER 18 2929 Arch Street 19 Cira Centre, 12th Floor 20 Philadelphia, Pennsylvania 19104 21 215-568-3100 22 dgoettle@bakerlaw.com 23 in support of motion for 12 Preliminary injunction 14 Pages 1-10 15 Provisional Patent 113 Application Serial Number 16 (6)/639054 18 Provisional Patent 124 Application Serial Number 17 Application Serial Number 18 Application Serial Number 20 Philadelphia, Pennsylvania 19104 21 Application Serial Number 22 Application Serial Number 23 60/728168, Stray Voltage	9	<u> </u>	9	
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	1	agoctio@bakcitaw.com	1	
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<sup>2 (</sup>Pages 2 to 5)

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EXHIBITS (Continued)	1	a witness called for examination, having been
	2	first duly swom, was examined and testified as
EXHIBIT NO. DESCRIPTION PAGE	3	follows:
6 U.S. Patent 7,248,054, 132	4	EXAMINATION BY COUNSEL FOR DEFENDANT NARDA
	5	BY MR. GOETTLE:
2 -	6	Q. Morning Mr. Kalokitis.
7 U.S. Patent 8,598,864 134	7	A. Good morning.
Apparatus and Method For	8	Q. How are you?
	9	A. Good.
	10	Q. Have you been deposed before?
Anomalies	11	A. I have not.
8 U.S. Patent 8,577,631 141	12	Q. Okay. So, you probably are aware,
	13	but I'm going to ask you some questions, and I
Discrimination of Sources	14	would ask you to answer them, unless your
in Stray Voltage Detection	15	attorneys instruct you not to.
-	16	A. Okay.
10 IEEE Standard 644, Standard 213	17	Q. If you don't understand my question,
Procedure For Measurement of	18	please just ask me to clarify. I'm happy to do
	19	that. I want to get a really clear record and I
- · · · · · · · · · · · · · · · · · · ·	20	want to make sure that you and I have a meeting
Lines	21	of the minds in terms of what I am asking, and
	22	what you are answering, is that okay?
	23	A. Okay.
	24	Q. Would it be safe to assume if you
Page 7		Page 9
PROCEEDINGS	1	don't ask me to clarify my question that you
		understand the question as I have asked it?
	3	A. Yes.
	4	Q. Any reason today you can't testify
	5	truthfully?
	6	A. No.
	7	Q. Any reason today that you can't
et al. This deposition is being conducted at	8	testify completely?
1100 New York Avenue Northwest, Washington,	9	A. No.
D.C.	10	Q. Okay. So, as I go through today if
Will all attorneys present please	11	you want to take a break for any reason at all
identify themselves and who they represent.	12	you can just give me the sign and we can take a
MR. GOETTLE: Dan Goettle of	13	break, okay?
BakerHostetler for the defendant Narda.	14	A. Okay.
MR. EVENS: Mark Evens for	15	Q. The only caveat to that is I would
defendant, ah, yeah, for plaintiff, Power	16	ask that if I have a question pending that you
Survey and with me is Michael Ray and Nirav	17	answer the question before we take the break.
Desai.	18	Okay?
VIDEOGRAPHER: My name is Michael	19	A. Okay.
Gay. I am with Golkow Technologies. Our	20	Q. Okay. And today, so, I have, just
court reporter today is Lori Goodin, also	21	so you know what I'm doing, on my screen here I
with Golkow Technologies and will now swear	22	have my outline just so I can keep my thoughts
		, , ,
in our witness.	23	clear which will help us get through this a
	Apparatus and Method For Detecting an Electric Field  U.S. Patent 8,598,864 134 Apparatus and Method For Monitoring and Controlling Detection of Stray Voltage Anomalies  U.S. Patent 8,577,631 141 Method and Apparatus For Discrimination of Sources in Stray Voltage Detection  U.S. Patent 8,482,274 177  IEEE Standard 644, Standard 213 Procedure For Measurement of Power Frequency Electric and Magnetic Fields From AC Power Lines  Page 7  PROCEEDINGS THE VIDEOGRAPHER: We are on the record. The time now is 9:32. This marks the beginning of Disk Number 1 for the videotaped deposition testimony of David Kalokitis, in the matter of Power Survey, LLC, versus Premier Utility Services, LLC, et al. This deposition is being conducted at 1100 New York Avenue Northwest, Washington, D.C. Will all attorneys present please identify themselves and who they represent. MR. GOETTLE: Dan Goettle of BakerHostetler for the defendant Narda. MR. EVENS: Mark Evens for defendant, ah, yeah, for plaintiff, Power Survey and with me is Michael Ray and Nirav Desai. VIDEOGRAPHER: My name is Michael Gay. I am with Golkow Technologies. Our	ALOKITIS EXHIBIT NO. DESCRIPTION PAGE  6 U.S. Patent 7,248,054, 132 Apparatus and Method For Detecting an Electric Field  7 U.S. Patent 8,598,864 134 Apparatus and Method For Monitoring and Controlling Detection of Stray Voltage Anomalies  8 U.S. Patent 8,577,631 141 Method and Apparatus For Discrimination of Sources in Stray Voltage Detection  9 U.S. Patent 8,482,274 177  10 IEEE Standard 644, Standard 213 Procedure For Measurement of Power Frequency Electric and Magnetic Fields From AC Power Lines  Page 7  PROCEEDINGS THE VIDEOGRAPHER: We are on the record. The time now is 9:32. This marks the beginning of Disk Number 1 for the videotaped deposition testimony of David Kalokitis, in the matter of Power Survey, LLC, versus Premier Utility Services, LLC, et al. This deposition is being conducted at 1100 New York Avenue Northwest, Washington, D.C. Will all attorneys present please identify themselves and who they represent. MR. GOETTLE: Dan Goettle of BakerHostetler for the defendant Narda. MR. EVENS: Mark Evens for defendant, ah, yeah, for plaintiff, Power Survey and with me is Michael Ray and Nirav Desai. VIDEOGRAPHER: My name is Michael Gay. I am with Golkow Technologies. Our

3 (Pages 6 to 9)

#### Page 10 Page 12 1 A. Okay. 1 Q. So that is kind of like the 2 2 Q. And then I have a box of documents overarching theme for today. 3 3 back here, I have never used my entire box of The last before we get into the fun 4 documents in any deposition, so I don't 4 stuff, your background. Today I'm not 5 5 anticipate we will be flipping through every one anticipating in getting into any Power Survey 6 6 of those documents, okay? confidential information. Okay? 7 7 A. Okay. A. Okay. 8 Q. And then I'm going to be giving you 8 Q. And my, it might be that we end up 9 9 documents as we go today. If you want to take there, so be it, but my goal would be to not 10 your time and review them before I start asking 10 elicit a response from you that is going to 11 you questions, you just start reviewing and I divulge confidential information. Okay? 11 12 will take from your body language that you want 12 A. Okay. 13 to review and I will wait. Okay? 13 Q. So, I understand it might be hard to 14 A. Okay. 14 remember while we are going and I get it, but, if 15 Q. In terms of the road maps so you can 15 to the extent that you can remember, and tell me 16 kind of see how we are progressing today, I will 16 before you answer, that, the answer you are about 17 give you kind of a general understanding of where 17 to give is Power Survey confidential information, 18 I'm going, okay? 18 would you let me know? 19 A. Okay. 19 A. Yes. 20 Q. First I'm going to do some 20 Q. Okay. Thank you. Okay. So let's 21 introductory stuff which is what I'm almost done. start with your education. Can you describe your 21 22 I want to then get into your 22 educational path post high school? 23 background, your educational and professional 23 A. Yes. Four-year degree, Bachelor of 24 experience. 24 Science in Electrical Engineering from Trenton Page 11 Page 13 1 A. Okay. 1 State College in 1983. 2 Q. And then I'm going to talk to you 2 I started working at Sarnoff 3 3 Corporation in 1983. While attending Sarnoff, I about the inventions of the asserted patents, 4 okay? 4 went to Monmouth University and got a Master of 5 Science in Electrical Engineering, graduated in 5 Yes. 6 6 1990. And I want to get the story behind 7 those inventions, where they came from that kind 7 Q. So, in your time getting your B.S. 8 8 of Electrical Engineering, did you take computer 9 9 And then I want to talk to you about courses? the inventors and their role in the inventions of 10 10 A. Yes. 11 the patent. 11 Q. What were they? 12 A. Okay. 12 A. Computer languages. 13 13 Q. And then I want to talk to you about Q. Sure. That would be great. what some of the patent claims mean in terms of 14 14 A. Courses in FORTRAN, courses in 15 how they are, how they are implemented in Power 15 assembler languages, and computer, some computer 16 Survey's system, in your system, okay? 16 architecture, computer networks. 17 A. Okay. 17 Q. In 1983, what did you learn about 18 Q. And then we will talk about Narda's 18 computer networks? 19 system. And then I would like to talk a little 19 A. The computer networks courses were 20 bit about some prior art issues, although I don't 20 part of my master's degree. 21 think we are going to get into prior art today. 21 Q. Okay. So that was more closer than 22 A. Okay. 22 the 1990 time frame? 23 We might, but I don't know. 23 A. In the, yes, in that zone. Q. 24 A. Okay. 24 Q. Okay. So, as an undergrad you had a

	Page 14		Page 16
1	little bit in FORTRAN, assembler and a little bit	1.	Q. And no breaks in between? You were
2	of computer architecture; is that right?	2	at Sarnoff that entire 24, 25-year period?
3	A. In school, yes.	3	A. Yes.
4	Q. And then getting your master's you	4	Q. So, when you started at Sarnoff in
5	dived a little more into computer networking?	. 5	1984
6	A. A little bit.	6	A. '83.
7	Q. Did you learn how to perform	7	Q. '83. What were your job
8	programming, computer programming?	8	responsibilities?
9	A. Yes.	9	A. I was a senior technical associate
10	Q. In FORTRAN?	10	and I worked in the microwave group, designing,
11	A. Yes.	11	building, testing microwave antennas, circuits
12	Q. And in assembler languages?	12	and the like.
13	A. Yes.	13	Q. Did that work in the microwave group
14	Q. Did you do any object oriented	14	involve any digital signal processing?
15	programming?	15	A. At what time?
16	A. Not at that time.	16	Q. In the 1983 time frame when you
17	Q. Not at that time. How about with	17	started as a senior technical associate in the
18	the master's, object oriented programming?	18	microwave group, did your work involve digital
19	A. Not at that time.	19	signal processing?
20	Q. Okay. So you have done that in	20	A. No.
21	terms of your work at Sarnoff or at Power Survey?	21	Q. And how long were you, do I have the
22	A. I had some experience with that at	22	term right, senior technical associate?
23	Sarnoff.	23	A. Yes.
24	Q. I see. Can you read computer code?	24	Q. How long were you a senior technical
	Page 15		Page 17
1	A. Somewhat. I am not a computer	1	associate in the microwave group?
2	expert.	2	A. A few years.
3	Q. Uh-huh. But somewhat you can read	3	Q. And during that time you worked
4	it?	4	primarily on antennas and circuits as they relate
5	A. Somewhat.	5	to microwave technology?
6	Q. Did you do any of the programming on	6	A. Yes.
7	Power Survey's system?	7	Q. Okay.
8	A. No.	8	So, after those few years, what did
9	Q. So, you got your degree at Monmouth	9	you do next at Sarnoff?
_	while working at Sarnoff?	10	A. I continued in the microwave group;
1.0	A. Yes.	11	I worked on, continued to work in those areas. I
10 11		,	
11		12	
11 12	Q. So, you went and did that at night?	12 13	worked on automated testing equipment, setting up
11 12 13	<ul><li>Q. So, you went and did that at night?</li><li>A. Yes.</li></ul>	13	worked on automated testing equipment, setting up automated equipment that was computer-controlled
11 12 13 14	<ul><li>Q. So, you went and did that at night?</li><li>A. Yes.</li><li>Q. How long did that take you?</li></ul>	13 14	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.
11 12 13 14 15	<ul><li>Q. So, you went and did that at night?</li><li>A. Yes.</li><li>Q. How long did that take you?</li><li>A. Four years.</li></ul>	13 14 15	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.  Q. And I take it at some point after
11 12 13 14 15	<ul><li>Q. So, you went and did that at night?</li><li>A. Yes.</li><li>Q. How long did that take you?</li><li>A. Four years.</li><li>Q. Four years. Was that fun going to</li></ul>	13 14 15 16	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.  Q. And I take it at some point after you were a senior technical associate you got a
11 12 13 14 15 16 17	<ul> <li>Q. So, you went and did that at night?</li> <li>A. Yes.</li> <li>Q. How long did that take you?</li> <li>A. Four years.</li> <li>Q. Four years. Was that fun going to work all day and then going to school at night?</li> </ul>	13 14 15 16 17	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.  Q. And I take it at some point after you were a senior technical associate you got a promotion in the microwave group?
11 12 13 14 15 16 17	<ul> <li>Q. So, you went and did that at night?</li> <li>A. Yes.</li> <li>Q. How long did that take you?</li> <li>A. Four years.</li> <li>Q. Four years. Was that fun going to work all day and then going to school at night?</li> <li>A. Yes.</li> </ul>	13 14 15 16 17 18	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.  Q. And I take it at some point after you were a senior technical associate you got a promotion in the microwave group?  A. Yes.
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11 12 13 14 15 16 17 18 19 20 21	<ul> <li>Q. So, you went and did that at night?</li> <li>A. Yes.</li> <li>Q. How long did that take you?</li> <li>A. Four years.</li> <li>Q. Four years. Was that fun going to work all day and then going to school at night?</li> <li>A. Yes.</li> <li>Q. That is good. Okay. So let's talk about your work at Sarnoff. I take it, then, your, in terms of your professional employer</li> </ul>	13 14 15 16 17 18 19 20 21	worked on automated testing equipment, setting up automated equipment that was computer-controlled to perform measurements on microwave circuits.  Q. And I take it at some point after you were a senior technical associate you got a promotion in the microwave group?  A. Yes.  Q. What was your title with the first promotion?  A. Associate member of the technical

,	Page 18		Page 20
1	A. Technical staff.	1	A. Yes.
2	Q. And that was a few years later so	2	Q. And whether they sold the circuits
3	that was probably '86, '87 time frame?	3	or not they probably at least gave the technology
4	A. I don't recall exactly.	4	on how to design these circuits to the customers
5	Q. Okay. How many employees were in	5	or contractors?
6	the microwave group when you joined there in '83?	6	A. Deliverables varied, but technology
7	A. Approximately 100.	7	development was a big component of Sarnoff's
8	Q. Wow. So, we are not talking about	8	business.
9	microwave ovens I take it?	9	Q. Okay. At that time when you were an
10	A. No.	10	associate member of the technical staff, did you
11	Q. And then when you got promoted to	11	do digital signal processing then?
12	associate member of the technical staff, how many	12	A. No.
13	folks were in the microwave group?	13	Q. So, how long did you do that work as
14	A. Approximately 100. Same.	14	an associate member of the technical staff in the
15	Q. These microwave circuits that you	15	microwave group?
16	helped develop automated testing of, what are	16	A. A few years.
17	they used in? What were they used in?	17	Q. A few years. And then what was
18	A. Microwave communications systems.	18	next?
19	Q. Can you give me an example?	19	A. I was eventually promoted to member
20	A. Satellite communications. Radar.	20	of the technical staff.
21	Q. And I take it that Sarnoff had	21	Q. Do you recall when that was?
22	customers for the automated testing equipment?	22	A. Approximately 1993.
23	A. No.	23	Q. And with that promotion in 1993, did
24	Q. No. What did Sarnoff do with the	24	your job duties change?
	D 10		
	Page 19		Page 21
1	equipment that it was developing?	1	A. Not specifically. It was an R&D
2	equipment that it was developing?  A. We weren't developing equipment for	2	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know,
2 3	equipment that it was developing?  A. We weren't developing equipment for customers, we weren't developing test equipment	2 3	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know, to people's responsibilities. You would work on
2 3 4	equipment that it was developing?  A. We weren't developing equipment for customers, we weren't developing test equipment for customers.	2 3 4	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know, to people's responsibilities. You would work on projects as needed and it wasn't, it wasn't a
2 3 4 5	equipment that it was developing?  A. We weren't developing equipment for customers, we weren't developing test equipment for customers.  Q. I see. What was Sarnoff using the	2 3 4 5	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know, to people's responsibilities. You would work on projects as needed and it wasn't, it wasn't a silo, you know, of work.
2 3 4 5 6	equipment that it was developing?  A. We weren't developing equipment for customers, we weren't developing test equipment for customers.  Q. I see. What was Sarnoff using the test equipment for?	2 3 4 5 6	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know, to people's responsibilities. You would work on projects as needed and it wasn't, it wasn't a silo, you know, of work.  Q. I understand. So, at that time were
2 3 4 5 6 7	equipment that it was developing?  A. We weren't developing equipment for customers, we weren't developing test equipment for customers.  Q. I see. What was Sarnoff using the test equipment for?  A. To test the microwave circuits that	2 3 4 5 6 7	A. Not specifically. It was an R&D facility, so it was a lot of matrix to, you know, to people's responsibilities. You would work on projects as needed and it wasn't, it wasn't a silo, you know, of work.  Q. I understand. So, at that time were you still working on developing the automated
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	Page 22		Page 24
1	LORAN-C.	1	you?
2	A. Okay. So, if you want to navigate	2	MR. EVENS: I'm going to object to
3	inside a building, and you can't see a satellite,	3	the form of the question. But go on and
4	that would be an application, a GPS denied	4	answer.
5	navigation.	5	THE WITNESS: Digital signal
6	Q. So, I see. So denied means you are	6	processing is when you take a signal from the
7	not using GPS?	7	analog domain and you digitize it and perform
8	A. Yes.	8	some manipulations on it.
9	Q. So, what technique would you use if	9	BY MR. GOETTLE:
10	you didn't have GPS?	10	Q. You digitize it. I didn't hear the
11	A. We would use various microwave	11	last part?
12	signal propagation, signal processing, techniques	12	A. You digitize it and perform some
13	to recognize where a person, you know, who is	13	manipulations in the digital data.
14	carrying some equipment, to recognize their	14	Q. And how is the analog signal
15	location.	15	digitized using digital signal processing?
16	Q. I see.	16	A. In what application?
17	A. Transponders.	17	Q. In, like, what are all, I just want
18	Q. I see. And what was your role in	18	to know, like what are all of the ways, different
19	that project?	19	ways, no matter the application of digitizing an
20	A. I was a lead engineer on some of	20	analog signal?
21	those projects.	21	A. An analog to digital converter is a
22	Q. So, you kind of hinted that there	22	routine component for that application.
23	was, there were items you were working on at the	23	Q. So that is a device or a chip that
24	time other than GPS denied navigation. What were	24	performs the digitizing?
	Page 23		
1	410	1	Page 25
1	they?	1	A. Yes.
2	A. Microwave superconductivity.	2	<ul><li>A. Yes.</li><li>Q. How do those chips perform the</li></ul>
2	<ul><li>A. Microwave superconductivity.</li><li>Q. Anything else?</li></ul>	2 3	A. Yes. Q. How do those chips perform the digitizing?
2 3 4	<ul><li>A. Microwave superconductivity.</li><li>Q. Anything else?</li><li>A. I don't think so.</li></ul>	2 3 4	<ul><li>A. Yes.</li><li>Q. How do those chips perform the digitizing?</li><li>A. I'm not an analog to digital</li></ul>
2 3 4 5	<ul><li>A. Microwave superconductivity.</li><li>Q. Anything else?</li><li>A. I don't think so.</li><li>Q. Did the work on GPS, by the way is</li></ul>	2 3 4 5	<ul> <li>A. Yes.</li> <li>Q. How do those chips perform the digitizing?</li> <li>A. I'm not an analog to digital converter designer.</li> </ul>
2 3 4 5 6	<ul> <li>A. Microwave superconductivity.</li> <li>Q. Anything else?</li> <li>A. I don't think so.</li> <li>Q. Did the work on GPS, by the way is microwave superconductivity different than GPS</li> </ul>	2 3 4 5 6	<ul> <li>A. Yes.</li> <li>Q. How do those chips perform the digitizing?</li> <li>A. I'm not an analog to digital converter designer.</li> <li>Q. I see. But I mean you are aware</li> </ul>
2 3 4 5 6 7	<ul> <li>A. Microwave superconductivity.</li> <li>Q. Anything else?</li> <li>A. I don't think so.</li> <li>Q. Did the work on GPS, by the way is microwave superconductivity different than GPS denied navigation?</li> </ul>	2 3 4 5 6 7	<ul> <li>A. Yes.</li> <li>Q. How do those chips perform the digitizing?</li> <li>A. I'm not an analog to digital converter designer.</li> <li>Q. I see. But I mean you are aware that one way to digitize an analog signal is to</li> </ul>
2 3 4 5 6 7 8	<ul> <li>A. Microwave superconductivity.</li> <li>Q. Anything else?</li> <li>A. I don't think so.</li> <li>Q. Did the work on GPS, by the way is microwave superconductivity different than GPS denied navigation?</li> <li>A. Yes.</li> </ul>	2 3 4 5 6 7 8	<ul> <li>A. Yes.</li> <li>Q. How do those chips perform the digitizing?</li> <li>A. I'm not an analog to digital converter designer.</li> <li>Q. I see. But I mean you are aware that one way to digitize an analog signal is to sample it as a matter of time, right?</li> </ul>
2 3 4 5 6 7 8 9	<ul> <li>A. Microwave superconductivity.</li> <li>Q. Anything else?</li> <li>A. I don't think so.</li> <li>Q. Did the work on GPS, by the way is microwave superconductivity different than GPS denied navigation?</li> <li>A. Yes.</li> <li>Q. Okay. Did your work on GPS denied</li> </ul>	2 3 4 5 6 7 8	<ul> <li>A. Yes.</li> <li>Q. How do those chips perform the digitizing?</li> <li>A. I'm not an analog to digital converter designer.</li> <li>Q. I see. But I mean you are aware that one way to digitize an analog signal is to sample it as a matter of time, right?</li> <li>A. Yes.</li> </ul>
2 3 4 5 6 7 8 9	<ul> <li>A. Microwave superconductivity.</li> <li>Q. Anything else?</li> <li>A. I don't think so.</li> <li>Q. Did the work on GPS, by the way is microwave superconductivity different than GPS denied navigation?</li> <li>A. Yes.</li> <li>Q. Okay. Did your work on GPS denied navigation involve digital signal processing?</li> </ul>	2 3 4 5 6 7 8 9	A. Yes. Q. How do those chips perform the digitizing? A. I'm not an analog to digital converter designer. Q. I see. But I mean you are aware that one way to digitize an analog signal is to sample it as a matter of time, right? A. Yes. Q. Okay. Is there any other way to
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	A. Microwave superconductivity. Q. Anything else? A. I don't think so. Q. Did the work on GPS, by the way is microwave superconductivity different than GPS denied navigation? A. Yes. Q. Okay. Did your work on GPS denied navigation involve digital signal processing? A. Yes. Q. And were you involved in the digital signal processing? A. In what way? Q. In any way with respect to the GPS denied navigation? A. Yes. Q. You personally? A. Yes. Q. Okay. How about with the microwave	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	A. Yes. Q. How do those chips perform the digitizing? A. I'm not an analog to digital converter designer. Q. I see. But I mean you are aware that one way to digitize an analog signal is to sample it as a matter of time, right? A. Yes. Q. Okay. Is there any other way to digitize an analog signal? A. I don't know. Q. So, digitizing by sampling as a matter of time is the only way that you know of to digitize an analog signal? A. I've heard other terminology in the area of signal capture. But, I don't have specifics. Q. Okay. So, can you tell me what microwave superconductivity is?

	Page 26		Page 28
1	of those materials at microwave frequencies.	1	Q. How long, after the late 1990s did
2	Q. Okay. We're up to you being a	2	you continue working on radar?
3	member of the technical staff.	3	A. It was a few year span of the radar
4	A. Yes.	4	work.
5	Q. Promoted to that position in 1993.	5	Q. You don't recall when?
6	A. Yes.	6	A. I don't recall.
7	O. What was next?	7	
8	A. I worked on radar.	8	<ul><li>Q. Okay. So what came after radar?</li><li>A. I worked on direct broadcast</li></ul>
9		9	satellite.
10	Q. When did that work start? A. Late '90s.	10	
11	Q. Late 90s. In between 1993 and the	11	<ul><li>Q. This is after your work on radar?</li><li>A. Similar time frames. I don't recall</li></ul>
12	· · · · · · · · · · · · · · · · · · ·	12	
13	late '90s, was that seven-year or so time period,	13	the time frames. It was a long career.
14	during that seven-year or so time period, you were still a member of the technical staff?	14	Q. So, what is direct broadcast satellite?
15	A. Yes.	15	
		1	A. Dish Network, DirecTV.
16 17	Q. And that was still within the	16 17	Q. I still use cable. So, what did
	microwave group?	ı	your work on direct broadcast satellite entail?
18	A. Yes.	18 19	A. Designing microwave circuits.
1	Q. Okay. And then when the work in the	ı	Q. So this is all still part of the
20	late '90s began on the radar was that still in	20	microwave group?
21	the microwave group?	21	A. Yes.
22	A. Yes.	22	Q. And at that time this time are you
23	Q. And were you, at that point still a	23	still a member of technical staff?
24	member of the technical staff?	24	A. Yes.
	Page 27		Page 29
1	A. Yes.	1	Q. Okay. And when did that, how long
2	Q. And what did your work on radar	2	did you do that work for, direct broadcast
3	entail?	3	satellite work?
4	A. In what regard?	4	A. A few years.
5	Q. In any regard. What was your	5	Q. So, we are into the early 2000s at
6	involvement with radar?	6	this point.
7	A. I worked on Doppler speed sensors.	7	A. Okay.
8	Q. And that would be a piece of a	8	Q. Is that right?
9	radar, Doppler speed sensor?	9	A. Sounds right.
10	A. That is a sensor system that	10	Q. Okay. Still, about 100 members in
11	measures speed.	11	the microwave group?
12	Q. It would be measuring the speed of	12	A. Probably smaller at that point.
13	something that is out there that has been	13	Q. 80? Too hard to say?
14	detected using the radar?	14	A. Too hard to say.
15	A. That is an application.	15	Q. Okay. So, at that time when you
16	Q. There are other applications?	16	were doing the work on the direct broadcast
17	A. There are many.	17	satellite in the microwave group, how many other
18	Q. What are, can you just give me some,	18	groups were at Sarnoff?
19	so I can get a better understanding?	19	A. I don't recall.
20	A. Measure the speed of a pitch.	20	Q. Under ten?
21	Q. Speed of a pitch?	21	A. Probably more.
22	A. Ball game, baseball.	22	Q. More than ten. Okay. You think
23	Q. Cool. Speed of a car?	23	there would be more than 15?
24	A. Speed of a car.	24	A. Define group.

#### Page 32 Page 30 1 Q. Well, you used the term microwave 1 point, and taking direct broadcast satellite work 2 group. So, I don't know how to define it except 2 as the beginning, in between, what other work did 3 3 that there was a group of microwave folks. you do aside from the work on synchronizing 4 4 A. It would be an exercise to explain electric company substations? 5 5 the matrix. A. I did work on communications, 6 6 Q. Is that right? digital communications for utility, utility 7 7 A. The matrix and the structure as it network equipment. Electric network equipment. 8 evolved over the years at Sarnoff. 8 Q. Okay. Could you pretend I'm like a 9 Q. Okay. Do you have a sense at that 9 10th grader and explain what that means? 10 10 time when you were the working on direct A. A utility has control systems to 11 broadcast satellite how many employees, 11 control the electric flows, right. And monitor 12 approximately, how big Sarnoff was? 12 the flow of electricity. 13 13 A. I would say under 1,000. Q. Okay. 14 14 Q. Under 1,000. And geographically A. And adjust the flow of electricity. where would those 1,000 people have come to work? 15 15 And that equipment is and can be controlled 16 All in New Jersey? 16 remotely, and it can be and is sometimes 17 1.7 A. No. controlled using cellular communications. So I 18 Where would they work? 18 worked on some of that technology. Q. 19 A. There were other offices Sarnoff 19 Q. I see. Anything else you can recall had. I don't recall the locations. But there 20 20 in that time period? 21 21 were outposts. A. Nothing, nothing jumps out at me. 22 Q. Was New Jersey the place where most, 22 Q. Okay. And then we get in, and then 23 23 where the most Sarnoff employees were? we evolve into the work that led to the patents 24 A. Yes. 24 in suit, right? Page 31 Page 33 Q. Okay. So, after direct broadcast A. Yes. 1 1 2 satellite work, what was next? 2 Q. When you got in, got to that point 3 3 A. My work was project oriented, not at Sarnoff and working on that project of stray 4 necessarily in a silo. So, an example project 4 voltage detection, did you continue to do other 5 5 things at Sarnoff? would be synchronizing substations, electric 6 company substations, synchronizing substations. 6 A. It depends on the time frame. As a 7 7 Q. And whether you were doing that work project engineer you try and handle whatever 8 8 projects are, you know, that you have proposed or you were still part of the microwave group? 9 9 want or whatever. So it is hard to say A. Yes. 10 Q. Okay. And do you recall when that specifically on any day or month or band of 10 11 work was? 11 months, what I was working on. 12 Q. So, you weren't exclusively working 12 A. Early 2000s. 13 13 Q. Okay. So, I guess maybe to bring it on the stray voltage detection project? 14 14 to a head, in between that work or your work on A. Depends on the time frame. 15 15 the direct broadcast satellite and your work that Q. Well, at any time were you working 16 led to the inventions in the patent, what did you 16 on things, at the general time frame that you are 17 17 do in that time period? still developing and working on the prototyping 18 18 for the stray voltage system or developing the A. Repeat that question. 19 Q. So, from your Declaration I 19 trailer based system, during that time frame, 20 20 understand that the, your work on stray voltage did, is it, do you think you had other projects 21 detection began somewhere in 2004/2005 time 21 going on outside of that technology? 22 22 A. My main focus was stray voltage frame. 23 technology, when I got started in stray voltage 23 A. Yes. 24 Q. Okay. So, taking that as the end 24 technology.

	Page 34		Page 36
1	Q. I see. Are you an author on any	1	A. Are you referring published papers?
2	publications?	2	Q. Yes.
3	A. Yes.	3	A. And only published papers?
4	Q. All within the field of microwave	4	Q. Yes. For now, let's assume that.
5	technology?	5	Published papers.
6	A. Yes.	6	A. I might have some things outside of
7	Q. By the way would you place, is this,	7	that arena. Actually I do. I published an
8	was the stray voltage work, was that within the	8	article on synchronizing power substations.
9	microwave group as well?	9	Q. Can we, okay if we go off the
10	A. Yes, yes. Yes.	10	record?
11	Q. So, everybody that, everybody that	11	MR. EVENS: Let's go off the record.
12	worked on that project would have been within	12	THE VIDEOGRAPHER: The time now is
13	your microwave group?	13	10:08, we are going off the record.
14	A. No.	14	(Recess taken 10:08 a.m.)
15	Q. Who wouldn't be in that?	15	(After recess 10:21 a.m.)
16	A. We had a matrix, an engineering	16	THE VIDEOGRAPHER: The time now is
17	matrix, so, we had a model shop.	17	10:21, we are back on the record.
18	Q. I see.	18	BY MR. GOETTLE:
19	A. For those things.	19	Q. Okay. I think when we broke you
20	Q. Yes.	20	were just telling me that you had written a
21	A. And an array of resources.	21	published article on synchronizing power
22	Q. What did the model shop do?	22	substations. Is that right?
23	A. That is where all of the machinists	23	A. Yes.
24	build all of the parts.	24	Q. Okay. And you had, you have written
	,		
	Da wa   3E	l	
	Page 35		Page 37
1	Q. Okay. What, you have mentioned it	1	Page 37 published articles on microwave circuits.
1 2	_	1 2	
	Q. Okay. What, you have mentioned it	l	published articles on microwave circuits.
2	Q. Okay. What, you have mentioned it before. What is an engineering matrix?	2	published articles on microwave circuits.  A. I want to correct the published
2 3	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you	2 3	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.
2 3 4	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would	2 3 4	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.
2 3 4 5	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you would need the entire team to be on your silo, right.	2 3 4 5	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.  But, it was published, but I can't remember if I
2 3 4 5 6	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you would need the entire team to be on your silo, right.  So, in a matrix you have a	2 3 4 5 6	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.  But, it was published, but I can't remember if I wrote it.
2 3 4 5 6 7	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you would need the entire team to be on your silo, right.  So, in a matrix you have a mechanical designer section, and maybe you have	2 3 4 5 6 7	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.  But, it was published, but I can't remember if I wrote it.  Q. I see.  A. It may have been a trade journal interview. I don't recall.
2 3 4 5 6 7 8	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you would need the entire team to be on your silo, right.  So, in a matrix you have a mechanical designer section, and maybe you have vision, a vision group that works with image	2 3 4 5 6 7 8	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.  But, it was published, but I can't remember if I wrote it.  Q. I see.  A. It may have been a trade journal interview. I don't recall.  Q. I think I actually read it. I think
2 3 4 5 6 7 8 9 10	Q. Okay. What, you have mentioned it before. What is an engineering matrix?  A. So, in a silo, right, everybody, if your microwave group was your silo, you would need your own, you wanted to build something, you would need the entire team to be on your silo, right.  So, in a matrix you have a mechanical designer section, and maybe you have vision, a vision group that works with image processing. Just, groups that are, are, have	2 3 4 5 6 7 8 9 10	published articles on microwave circuits.  A. I want to correct the published article on synchronizing substations.  There was an article about that.  But, it was published, but I can't remember if I wrote it.  Q. I see.  A. It may have been a trade journal interview. I don't recall.  Q. I think I actually read it. I think that is right, I think it was an interview.
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	Page 38		Page 40
1	MR. GOETTLE: Okay. Thank you.	1	A. Six.
2	BY MR. GOETTLE:	2	Q. 2006. And so this would have, and
3	Q. Okay. So, and I guess I'm really,	3	so, and then you went and worked for that
4	right now we are still in the Sarnoff time frame	4	division?
5	for your entire period at Sarnoff and talking	5	A. That is complicated, too. So,
6	about your published articles.	6	business entities and subsidiaries and employment
7	A. Yes.	7	and paychecks, you know, where they come from is
8	Q. Aside from those two categories,	8	not, there is, it is not straightforward.
9	microwave circuits and maybe synchronizing power	9	Q. Fair enough. Let me put it this
10	substations, maybe not, any other published	10	way. Were you still in the microwave group when
11	articles?	11	you started, when Sarnoff, when Power Survey was
12	A. You know, I have a list somewhere of	12	created?
13	publications. But, to tell you what is on it at	13	A. I was in, I was in the, whatever the
14	this point in time, I really don't recall.	14	current name of the microwave group was in 2006.
15	Q. Prior to the 2004 work on the stray	15	Q. I see.
16	voltage project, did you publish any articles on	16	A. Yes, I was in that group.
17	stray voltage?	17	Q. Okay. So, the microwave group that,
18	A. No.	18	the name of the group changed?
19	Q. Now let's talk about you. Let's	19	A. It had
20	talk about unpublished articles. Have you	20	Q. Or may have?
21	written unpublished articles?	21	A. It may have changed.
22	A. I have given many talks at symposia	22	Q. Okay. So, Power Survey was created
23	and conferences. And the associated documents	23	as a subsidiary of Sarnoff in 2006.
24	that go with that.	24	A. Yes.
	D 20		D 41
_	Page 39		Page 41
1	Q. So it could have conference papers,	1	Q. And in some form or another you
2	that kind of thing?	2	started to work within that subsidiary?
3			4 37
	A. Yes.	3	A. Yes.
4	Q. Are those types of papers, are they	4	Q. Okay. And then in 2007 Power Survey
4 5	Q. Are those types of papers, are they kept at Sarnoff's library?	4 5	Q. Okay. And then in 2007 Power Survey was, Sarnoff sold this subsidiary?
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4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Are those types of papers, are they kept at Sarnoff's library?  A. Not likely. Q. How about the published articles, does Sarnoff's library carry those? A. I don't know what is in Sarnoff's library these days. Q. Well, how about back then? A. I don't recall an effort to archive Sarnoff authors in their library. Q. Okay. So, you left Sarnoff in 2006? A. Seven. Q. 2007. And that is when you started co-founded Power Survey? A. Yes. Q. And A. No. I guess it is a little more complicated than that. So, Power Survey was a division, initially a division of Sarnoff.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Okay. And then in 2007 Power Survey was, Sarnoff sold this subsidiary?  A. Correct. Q. And did Sarnoff retain any ownership right in Power Survey? A. At that time frame? Q. At that time frame. A. It is not clear. Q. Not clear. And again, I go back to my concern about keeping this record nonconfidential. A. Uh-huh. Q. But, does Sarnoff, so with that in mind, does Sarnoff have any interest in Power Survey today? A. Today, no. Q. To your knowledge does Sarnoff have any financial interest in the outcome of this litigation?
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#### Page 42 Page 44 1 ownership interest after it was, after Sarnoff 1 process. 2 2 sold Power Survey, I understand from your Q. Uh-huh. 3 testimony, that Sarnoff did not have an ownership 3 A. Their techniques. Participate in 4 interest at that time? Or no, you said it was 4 industry professional, you know, IEEE functions. 5 unclear. 5 And to provide technical resources to our 6 6 customers and potential customers. A. It was unclear. 7 Q. Let me strike that because it was, 7 Q. Are you involved at all in, maybe 8 yes, you said it was unclear. Did it ever become 8 this is what is under the, under the umbrella of 9 clear that Sarnoff did have an ownership interest 9 technical processes, but are you involved in 10 10 in Power Survey? training Power Survey employees? A. Did it ever become clear that A. Yes. 11 11 12 Sarnoff did have --12 Q. And are all of the folks out in the 13 The, the, the acquisition of Power 13 trucks with the Power Survey device, are they all 14 Survey was, had some business aspects to it that, 14 employees of Power Survey? 15 you know, as the technical guy I probably don't 15 A. Define employee. 16 have clarity on what they were. 16 Q. Well, as opposed to an independent 17 Q. I see. 17 contractor. 18 A. The question about whether there is 18 A. Some of our folks are independent 19 ownership today, there is not. 19 contractors. 20 Q. Okay. 20 Q. I see. Do you have a sense of how A. But the transition period is unclear 21 many folks of those folks that do that work are 21 to me what particular things may have gone on, 22 employees versus independent contractors? 22 23 you know, in the early aspects of that. 23 A. It varies. 24 Q. Okay. The, I will submit to you and 24 Q. How so? Page 43 Page 45 1 I can show you if you want. But the first patent 1 A. It varies depending upon how many 2 2 in suit issued in July of 2013? jobs we are doing concurrently. 3 3 Q. I see. So you will have employees A. Okay. 4 Q. Since that time frame has Sarnoff 4 and then as the jobs, volume may increase then 5 you would bring in independent contractors? 5 had an ownership interest in Power Survey. 6 A. Since 2013. No. 6 A. Yes. 7 7 Q. Okay. Do you have a sense of how Q. Okay. So, you are, now you are the chief technology officer of Power Survey, right? 8 8 many employees right now do that job function of 9 9 A. Yes. driving around in the trucks to detect stray 10 10 Q. Have you always been the chief voltage? 11 technology officer? 11 A. I don't have an exact number. 12 Q. Do you have a rough number? 12 A. Yes. 13 Q. Okay. And have you held any other 13 A. Are you asking about field 14 positions at Power Survey? 14 technicians? 15 15 A. No. Q. Yes, the field technicians being the people that drive around in the trucks to detect 16 Q. And in your role as a chief 16 17 technology officer, what is your job functions? 17 the stray voltage. What are your job functions at Power Survey? 18 A. Approximately 20. 18 19 A. To develop our technology. To 19 Q. 20, okay. Do you have a financial 20 educate the public, the industry, and government 20 interest in the outcome of this case? 21 21 about the hazards of contact and stray voltage. A. How, how do I interpret that? 22 And to handle any technical 22 Q. Well, do you stand financial gain if 23 processes, technical field processes, you know, 23 Power Survey wins this case, and financial loss 24 what our technicians do in the field, their work 24 if Power Survey loses this case?

#### Page 46 Page 48 1 A. I would have to understand the -- do 1 Dave, do you know if the ownership 2 I -- I'm trying to think of how that, how that 2 is public at this time? 3 3 THE WITNESS: It is a privately held translates into my role with the company. My --4 Ask it another way. I'm not 4 company and there is no public disclosure of 5 quite -- do I personally have financial gain or 5 ownership. 6 loss if the company wins or loses the case. 6 MR. GOETTLE: So it is confidential 7 I have, I guess it depends what the 7 information? 8 outcome, what the ramifications of the win or 8 THE WITNESS: Yes. 9 loss is. 9 BY MR. GOETTLE: 10 Q. Fair enough. So let me try it a 10 Q. Thank you. Okay. 11 different way. Let's say, for example, if the 11 I would like to zero in to 2002 and 12 Power Survey wins this case and in part because 12 I would like to get an understanding to the best 13 of that win their profit margin increases. 13 you can recollect what you were doing in 2002 at 14 Will you stand to gain financially 14 Sarnoff. 15 because Power Survey is making more profit? 15 A. To tell you what I was doing in any 16 A. Yes. given year, I, I cannot. I'm not good at putting 16 17 O. How so? things in a time frame. I have a reasonable 17 18 A. My, I guess the company's valuation 18 sequence in my mind of the projects I have worked 19 would be higher. 19 on, but it would not be uncharacteristic for me 20 Q. And how does that translate to you 20 to have put one in front of the other incorrectly. 21 personally? 21 And to give you a, a spot on a 22 A. I have some small, small percentage 22 calendar on what I did in a year would not be 23 of ownership. 23 within my recollection. 24 Q. What percentage? 24 Q. Did you work at all on stray voltage Page 47 Page 49 1 A few percent. 1 detection in 2002? 2 Who else has ownership of Power 2 A. In 2002, stray voltage detection is Q. 3 3 Survey? unlikely. 4 MR. EVENS: I'm not sure if that is 4 Q. How about 2003? Did you work on 5 5 business confidential. It might be. stray voltage detection in 2003? 6 MR. GOETTLE: So --6 A. I did not have a stray voltage 7 7 project in 2003. To my knowledge. MR. EVENS: He is not a 30(b)(6). I 8 mean this witness is here as an individual. 8 Again, you are talking 11 years ago. 9 So I'm not sure what, how this would even be 9 Q. Uh-huh. Right. That is a long 10 10 time? relevant to the issues. MR. GOETTLE: Well, I don't, putting 11 A. That is a long time. 11 aside -- just to be clear, I do want to keep 12 Q. Yes. Okay. Well, let me do this. 12 13 I'm going to hand you what the court reporter has 13 the transcript nonconfidential, if that is, 14 already marked as Kalokitis Numero Uno. 14 if that is the nature of your warning. 15 MR. EVENS: I was thinking of some 15 MR. EVENS: I understand. way to help you out there, Dan, on the table. 16 MR. GOETTLE: Then I understand. 16 17 But if you are instructing him not to answer 17 Exhibit 1. 18 for some other reason, I would like to know. 18 (Kalokitis Exhibit Number 1 19 MR. EVENS: Well, I am concerned 19 marked for identification.) 20 20 about the relevance of the issue, but BY MR. GOETTLE: 21 particularly from this witness, can you 21 Q. You have Kalokitis Number 1 in front 22 explain why it would be relevant, who else is 22 of you? 23 an owner in the company? I'm not sure if it 23 A. I do. 24 is public information. Is it public? 24 Q. What is it?

	Page 50		Page 52
1	A. What is it? It says Declaration of	1	Manhattan by coming in contact with an energized
2	David Kalokitis In Support of Motion For	2	service box.
3	Preliminary Injunction on the cover.	3	Following that event Con Edison, who
4	Q. Do you recognize it?	4	had a longstanding R&D relationship, used Sarnoff
5	A. I do.	5	as an R&D research entity. Resource.
6	Q. And, this is your Declaration,	6	Con Ed came to Sarnoff and said we
7	correct?	7	have a problem with stray voltage in our system.
8	A. It is my Declaration.	8	We don't know how big it is. We don't know how
9	Q. And that is your signature on	9	to find it, and we don't know how to solve it.
10	Page 7?	. 10	And we need your help.
11	A. Yes, it is.	11	Q. Were you involved in that initial
12	Q. Okay. When was the last time you	12	meeting between Con Ed and Sarnoff?
13	saw this Declaration?	13	A. I was involved in the early meetings
14	A. I looked at it yesterday.	14	with Con Edison.
15	Q. You did. Did you see anything in it	15	Q. Who was at those meetings?
16	that you think warrants correction?	16	A. I don't recall. It would be, it
17	A. I don't recall anything that needs	17	would be normal for the representatives of
18	correction.	18	Con Ed's R&D department.
19	Q. Okay. You just didn't see any	19	Q. You don't recall any names?
20	mistakes in it?	20	A. No.
21	A. I don't recall any mistakes in it.	21	Q. Okay. How about from, so, you don't
22	Q. Okay. So I put this in front of	22	recall any names of any of the Con Ed folks that
23	you. You feel free to refer to it if you would	23	were at the meeting.
24	like to while I am asking you questions.	24	A. Right.
			_
	D 51	1	
	Page 51		Page 53
1	What I would like to get into, now,	1	Page 53  Q. Do you recall any of the names of
1 2	_	1 2	
l	What I would like to get into, now,	1	Q. Do you recall any of the names of
2	What I would like to get into, now, is sort of the background for the invention.	2	Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?
2	What I would like to get into, now, is sort of the background for the invention.  A. Okay.	2 3	<ul><li>Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?</li><li>A. I don't recall any of the names that</li></ul>
2 3 4	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm	2 3 4	<ul><li>Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?</li><li>A. I don't recall any of the names that were at the meeting.</li></ul>
2 3 4 5	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm referring to the inventions claimed in the three asserted patents.  A. Okay.	2 3 4 5	Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?  A. I don't recall any of the names that were at the meeting.  Q. I know, I have a feeling it is going to be hard to remember when that meeting occurred but maybe in relationship to when Jody Lane was
2 3 4 5 6	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm referring to the inventions claimed in the three asserted patents.	2 3 4 5 6	<ul> <li>Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?</li> <li>A. I don't recall any of the names that were at the meeting.</li> <li>Q. I know, I have a feeling it is going to be hard to remember when that meeting occurred</li> </ul>
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2 3 4 5 6 7 8	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm referring to the inventions claimed in the three asserted patents.  A. Okay.  Q. Okay. If the you need the patents	2 3 4 5 6 7 8	Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?  A. I don't recall any of the names that were at the meeting.  Q. I know, I have a feeling it is going to be hard to remember when that meeting occurred but maybe in relationship to when Jody Lane was electrocuted, do you have a recollection of weeks
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2 3 4 5 6 7 8 9 10 11 12	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm referring to the inventions claimed in the three asserted patents.  A. Okay.  Q. Okay. If the you need the patents I'm happy to give them to you. If you need anything I am happy, I have a whole box of documents.  A. Okay.	2 3 4 5 6 7 8 9 10 11 12	Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?  A. I don't recall any of the names that were at the meeting.  Q. I know, I have a feeling it is going to be hard to remember when that meeting occurred but maybe in relationship to when Jody Lane was electrocuted, do you have a recollection of weeks or months afterwards?  A. I don't have a recollection of dates, but I know there was an urgency and a timeliness associated with that event.  Q. Okay. So what happened after the initial meetings between Sarnoff and Con Ed?
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	What I would like to get into, now, is sort of the background for the invention.  A. Okay.  Q. And when I say the invention I'm referring to the inventions claimed in the three asserted patents.  A. Okay.  Q. Okay. If the you need the patents I'm happy to give them to you. If you need anything I am happy, I have a whole box of documents.  A. Okay.  Q. Hopefully, I thought I have and brought whatever you might want to look at.  A. Okay.  Q. So, tell me about how, I, my understanding is, and correct me if I'm wrong, my understanding is that Sarnoff began development of the stray voltage detection after being contacted by Con Ed.  A. Yes.  Q. Can you tell me about how that	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Do you recall any of the names of the Sarnoff folks that were at the meeting?  A. I don't recall any of the names that were at the meeting.  Q. I know, I have a feeling it is going to be hard to remember when that meeting occurred but maybe in relationship to when Jody Lane was electrocuted, do you have a recollection of weeks or months afterwards?  A. I don't have a recollection of dates, but I know there was an urgency and a timeliness associated with that event.  Q. Okay. So what happened after the initial meetings between Sarnoff and Con Ed?  A. We, we discussed a proposal with Con Edison for R&D services to develop a solution for them being able to find stray voltage in their system.  Q. Do you have that proposal?  A. I don't.  Q. I don't mean with you today, but does Power Survey have that proposal?

	Page 54		Page 56
1	it would have been kept with Sarnoff. But, I	1	a little bit.
2	don't think we have it.	2	A. Okay.
3	Q. Prior to Jody Lane's electrocution,	3	Q. So, I'm trying to get the clarity
4	had Con Ed ever come to Sarnoff and asked for	4	that I want on this record.
5	help addressing stray voltage?	5	A. Okay.
6	A. Yes.	6	Q. So, what was your involvement with
7	Q. When was that?	7	the work to detect stray voltage before Jody Lane
8	A. I would say in the, somewhere	8	was electrocuted?
9	between the two years before when Jody Lane was	9	A. I was not working on stray voltage
10	killed and when Jody Lane was killed. But I	10	before Jody Lane was electrocuted.
11	don't know exactly when.	11	Q. Okay. Were you involved at all
12	Q. And do you know anything about that	12	A. Maybe the statement indirect was too
13	initial contact?	13	strong.
14	A. The, the problem of stray voltage	14	Q. Okay. Meaning it was even less than
15	was described, to some of the engineers, some of	15	indirect?
16	us engineers at Sarnoff. And a, we did some	16	A. Yes.
17	early proof of concept work for Con Ed prior to	17	Q. Okay. I got you. Do you recall who
18	Jody Lane being killed.	18	from Sarnoff was involved in that early work?
19	Q. Were you involved in that work?	19	And by early work I mean before Jody Lane was
20	A. Not directly.	20	electrocuted?
21	Q. Okay. But indirectly?	21	A. What was that guy's name? It was an
22	A. Yes.	22	older engineer that retired. I am at a loss for
23	Q. So, earlier when I asked you if you	23	his name right now. I can picture him, but I
24	had done any stray voltage work prior to 2004	24	can't think of his name.
	Page 55		Page 57
1	A. Well, by indirectly, by indirectly	1	Q. Okay. You can't recall anybody's
2	it was done by, remember I said we were a	2	name?
3	research resource for Con Ed, so I was working on	3	A. I'm not recalling the names of the
			71. Thi not recurring the names of the
4	some microwave antennas for Con Ed, and the	4	guys that worked on that.
4 5	some microwave antennas for Con Ed, and the fellows that were in my group were working on a	<b>4</b> 5	_
			guys that worked on that.
5	fellows that were in my group were working on a	5	guys that worked on that.  Q. Do you recall, do you recall the
5 6	fellows that were in my group were working on a handheld stray voltage system.	5 6	guys that worked on that.  Q. Do you recall, do you recall the names of anybody from Con Ed involved at that
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5 6 7 8	fellows that were in my group were working on a handheld stray voltage system.  So, I was not part of that project.  But, I, I saw briefings on progress within that.	5 6 7 8	guys that worked on that.  Q. Do you recall, do you recall the names of anybody from Con Ed involved at that time before Jody Lane had been electrocuted?  A. No.  Q. So, what is your understanding of the work that Sarnoff did at that time before
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	Page 58		Page 60
1	Q. So, you saw a demonstration of the	1	parallel and I don't have a lot of clarity as to
2	testing of this handheld device?	2	what I may or may not have sat through in the
3	A. I saw it used, yes, I saw it	3	course of sometimes all-day meetings.
4	demonstrated, yes.	4	Q. And, if you had been there, it would
5	Q. Were you inside or outside?	5	have been because you were doing different work
6	A. Outside.	6	for Con Ed at the time?
7	Q. Was there a test track that Samoff	7	A. Yes, yes.
8	was using?	8	Q. I see. So, you don't recall whether
9	A. At that point in time I remember a	9	you sat through any briefings specific to this,
10	streetlight that was being, was the target on the	10	this project?
11	Sarnoff grounds.	11	A. I don't recall specifically sitting
12	But, I don't know the details of how	12	through a briefing on that project.
13	that streetlight became a target.	13	Q. And do you recall, I think I asked
14	Q. Do you know how the handheld sensor	14	you this already, but do you recall anybody from
15	was able to detect an energized streetlight?	15	Sarnoff that was working on the stray voltage
16	A. It was a, it was an analog circuit	16	project before Jody Lane had been electrocuted?
17	and it looked at the electric field gradient.	17	A. The older fellow that I mentioned
18	Electric field, electric field.	18	before.
19	Q. So it sensed the electric field that	19	Q. Whose idea was it with that earlier
20	was associated with the voltage on the	20	project prior to Jody Lane being electrocuted,
21	streetlight?	21	whose idea was it to measure an electric field
22	A. Yes.	22	associated with an energized object?
23	Q. Okay. Now was it detecting the	23	MR. EVENS: Objection, assumes a
24	streetlight because the light was on? Or because	24	fact not in evidence. Lack of foundation.
	Page 59		Page 61
1	Page 59	1	Page 61
1	the streetlight pole was energized? Do you	1 2	That is just a lawyer objection. If
2	the streetlight pole was energized? Do you recall?	2	That is just a lawyer objection. If you can, if you have personal knowledge and
2 3	the streetlight pole was energized? Do you recall?  A. I don't recall if the streetlight	2 3	That is just a lawyer objection. If you can, if you have personal knowledge and can answer, answer.
2 3 4	the streetlight pole was energized? Do you recall?  A. I don't recall if the streetlight was on or off. But it was daytime.	2 3 4	That is just a lawyer objection. If you can, if you have personal knowledge and can answer, answer.  THE WITNESS: Personal knowledge of
2 3 4 5	the streetlight pole was energized? Do you recall?  A. I don't recall if the streetlight was on or off. But it was daytime.  Q. So, I take it, then, that the pole	2 3 4 5	That is just a lawyer objection. If you can, if you have personal knowledge and can answer, answer.  THE WITNESS: Personal knowledge of whose idea it was to measure electric field
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Page 64 Page 62 1 whose -- is someone at Sarnoff likely to have 1 forward. 2 generated that idea, is that your question? 2 Q. Okay. So, would it have been 3 3 I think it is likely that -- I think someone from Sarnoff that would have come up with 4 the idea of detecting electric fields to find the 4 it is within the body of knowledge of, you 5 5 source of stray voltage? know, a, I think it is within the body of 6 6 A. I think since I wasn't in that knowledge of an engineer who is working in, 7 7 that has experience with electric fields. genesis part, it would be hard for me to say who 8 So, I don't know, I don't know where 8 exactly put that concept together and said, you 9 9 that, you know, initially would come from. know, this is what we should do. Q. Okay. You don't know whether that 10 10 BY MR. GOETTLE: 11 Q. It could have been that --11 idea came from Sarnoff? 12 A. I wasn't there. I wasn't in that 12 A. It seems rather obvious to someone 13 13 who, who, you know, that electric field is, is room. 14 Q. Okay. So you don't know whether 14 associated with electricity. 15 Sarnoff came up with that idea either --15 So, the obviousness is that electric 16 A. I don't know. 16 field is associated with electricity. 17 17 Q. Okay. I see. So, back in this time Q. -- because you weren't there. Okay. 18 frame prior to Jody Lane being electrocuted, and 18 What was your understanding of, when being confronted with this problem of trying to 19 you, either when you saw the handheld sensor, or 19 20 just because you were semi-cognizant of the 20 detect which object along a street might be 21 21 project, what was your understanding of what the energized by stray voltage, it would have been 22 handheld sensor was going to be used for? 22 obvious to the skilled artisan to detect the 23 MR. EVENS: Objection. Assumes a 23 electric fields to find those stray voltages? 24 fact not in evidence. Lack of foundation. 24 A. No. Page 63 Page 65 Q. No, okay. I misunderstood your last To the extent you can answer, you can answer. 1 1 2 2 THE WITNESS: So, ask it again, answer then. 3 MR. EVENS: Right now there is no 3 please. 4 BY MR. GOETTLE: 4 question pending. 5 5 THE WITNESS: Okay. Q. You were cognizant of this project 6 BY MR. GOETTLE: 6 going on, right? 7 7 A. Yes. Q. Do you understand why I don't 8 understand your last answer? 8 Q. Before Jody Lane was electrocuted. 9 9 A. No. 10 Q. And, you even saw a demonstration of 10 Q. Okay. Let's start over then just to 11 get the record clear and make sure I'm being very 11 the handheld sensor, right? clear with my questioning. 12 A. Yes. 12 13 Q. What was your understanding of what 13 A. Okay. 14 the use of that handheld sensor would be? 14 Q. I had asked you whether it was, whether you thought it was Con Ed's idea to 15 A. So, I saw it pointed at a 15 16 streetlight, and the concept was that there was 16 detect stray voltages by looking for electric 17 17 fields. Do you recall that? potentially voltage on that streetlight and this 18 A. I recall that. 18 was a sensing method to look at that. 19 Q. And the purpose of that was to see 19 Q. Yes. And I think your testimony was if it would work? you didn't think they had the technical ability 20 20 21 to come up with that idea. 21 A. Yes. 22 Q. To see if it could detect an 22 A. I, I, yes, I said they did not have 23 23 electric field associated with an energized light the, I don't think it was in their technical 24 prowess, or, you know, to put that concept 24 pole?

	Page 66		Page 68
1	A. Yes.	1	had no digitizing at all?
2	Q. And, did you have an understanding	2	A. It wasn't my design.
3	of whether an idea would have been to put that	3	Q. So, you don't know one way or the
4	handheld sensor on a vehicle and use it by	4	other?
5	driving up and down the street, rather than	5	A. I don't know the, I don't know the
6	holding it in your hand?	6	circuit design within that box.
7	A. That was not, that was not part of	7	Q. So it could just been digitizing,
8	my thinking at the time.	8	you just don't know.
9	Q. You gave it thought and that part	9	MR. EVENS: Object to the form of
10	never occurred to you?	10	the question. Lacks foundation. Beyond the
11	MR. EVENS: Objection. Lacks	11	scope of his knowledge.
12	foundation. Assumes facts not in evidence.	12	THE WITNESS: I can't comment on
13	And to the extent it relies on testimony, it	13	what is inside of that box. I didn't
14	would misstate his prior testimony, Dan.	14	design it.
15	THE WITNESS: Can I hear the	15	BY MR. GOETTLE:
16	question again?	16	Q. Okay. All I want to get to is the
17	BY MR. GOETTLE:	17	reason you can't comment is because you don't
18	Q. Yes, I lost the question, too.	18	know.
19	So, at the time of this development,	1,9	A. Yes, I don't know what was in that
20	Sarnoff's development of a handheld sensor prior	20	box I saw on that day that was pointed at that
21	to Jody Lane being electrocuted, it never	21	streetlight.
22	occurred to you one way or the other whether that	22	Q. Okay. Did you see any other, any
23	would be used on a vehicle?	23	further development of that handheld sensor?
24	A. No.	24	A. No.
	D 67		
1	Page 67	1	Page 69
1	MR. EVENS: Object to the form of	1	MR. EVENS: Objection, assumes facts
2	MR. EVENS: Object to the form of the question.	2	MR. EVENS: Objection, assumes facts not in evidence.
2 3	MR. EVENS: Object to the form of the question. BY MR. GOETTLE:	2 3	MR. EVENS: Objection, assumes facts not in evidence. BY MR. GOETTLE:
2 3 4	MR. EVENS: Object to the form of the question. BY MR. GOETTLE: Q. I think you testified that when you	2 3 4	MR. EVENS: Objection, assumes facts not in evidence. BY MR. GOETTLE: Q. Do you know what happened with that
2 3 4 5	MR. EVENS: Object to the form of the question. BY MR. GOETTLE: Q. I think you testified that when you saw the demonstration, the reason that you knew	2 3 4 5	MR. EVENS: Objection, assumes facts not in evidence. BY MR. GOETTLE: Q. Do you know what happened with that project, the stray voltage project prior to Jody
2 3 4 5 6	MR. EVENS: Object to the form of the question. BY MR. GOETTLE: Q. I think you testified that when you saw the demonstration, the reason that you knew that it worked to detect the voltage on the light	2 3 4 5 6	MR. EVENS: Objection, assumes facts not in evidence. BY MR. GOETTLE: Q. Do you know what happened with that project, the stray voltage project prior to Jody Lane being electrocuted?
2 3 4 5 6 7	MR. EVENS: Object to the form of the question. BY MR. GOETTLE: Q. I think you testified that when you saw the demonstration, the reason that you knew that it worked to detect the voltage on the light pole was because it had an indicator, or an alarm	2 3 4 5 6 7	MR. EVENS: Objection, assumes facts not in evidence.  BY MR. GOETTLE:  Q. Do you know what happened with that project, the stray voltage project prior to Jody Lane being electrocuted?  A. Do I know what happened with it? I
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#### Page 72 Page 70 1 had concluded at some level. 1 I'm not associating the calendar with this. 2 BY MR. GOETTLE: 2 I'm just saying that there was some 3 Q. Okay. Before Jody Lane was 3 effort prior to Jody Lane. She died in early 4 electrocuted? 4 5 A. Yes. 5 Q. Right. 6 6 A. The thing before early '04 is '03. Q. Okay. And I take it there was no 7 7 Q. Got you. So, at that time prior to other stray voltage project that you are aware of 8 8 that occurred at the conclusion of that project Jody Lane dying, you hadn't seen any 9 and prior to Con Ed coming to you after Jody Lane 9 documentation on that early stray voltage 10 was electrocuted? 10 project? 11 MR. EVENS: Object to the form of 11 A. I had, prior to Jody Lane dying, I 12 12 had not read any Sarnoff reports on stray voltage the question. 13 THE WITNESS: So --13 projects. Q. After Con Ed came to Sarnoff to talk 14 BY MR. GOETTLE: 14 15 Q. Let me rephrase it. It was a 15 about, to study stray voltage again, apparently terribly worded question. Even I was confused 16 16 again, did you at that point going forward ever 17 while I was saying it. 17 see any documentation of the early stray voltage 18 A. Okay. 18 project? 19 19 Q. Con Ed came to you in 2004 after A. So, in 2000, you are asking in 2004, 20 Jody Lane was electrocuted. Right? 20 did I see any documentation of the earlier work 21 MR. EVENS: Object to the form of 21 that was done at Sarnoff on stray voltage. 22 the question. Misstates the evidence. 22 I believe the schematics of that 23 THE WITNESS: Con Ed came to Sarnoff 23 equipment were available in the early '04, or in in 2004 after Jody Lane was electrocuted and 24 24 the post-Jody Lane's death time frame. Page 73 Page 71 1 asked for help. 1 Q. So, you may have seen a schematic 2 BY MR. GOETTLE: 2 diagram of that handheld probe we talked about 3 3 earlier? Q. By the way, just to step back, 4 before we leave the earlier, the pre-Jody Lane 4 A. I believe they were available. I 5 project for stray voltage, was, did Sarnoff 5 don't have specific recollection of reviewing 6 document that project in any way --6 them or whatever. 7 MR. EVENS: Objection. 7 Q. How would you have received them? 8 8 BY MR. GOETTLE: Or how would you have obtained them? 9 9 Q. -- that you are aware? MR. EVENS: Objection, lack of 10 A. I, I document my projects. I can't 10 foundation. And to the extent it is based on 11 speak for what level of documentation went on, 11 his testimony, it misstates the testimony. 12 you know, under someone else's leadership. 12 "It" being the question, sorry. 13 Q. You didn't see any documentation? 13 THE WITNESS: I'm sorry. Ask it 14 A. At that time, in 2003, I was not, I 14 again and I will see what I can --15 was not reading. No, I didn't see any. To my 15 BY MR. GOETTLE: 16 16 recollection, I didn't see any documentation at Q. Let me step back. 17 So Con Ed comes to Sarnoff after 17 that time. 18 Q. And you said 2003, is that when 18 Jody Lane is electrocuted, right? 19 19 A. Yes. this --20 20 Q. And Con Ed is coming to ask for help A. I'm using 2003, because that is a date I know to be prior to Jody Lane dying. 21 21 on a problem that they had already come to 22 22 Q. I see. Okay. Sarnoff about a few years earlier, right? 23 23 A. But I, to put an exact date and say A. At some time earlier. 24 that that happened in 2003, it is not a, it is, 24 Q. Some time earlier. And I would

#### Page 76 Page 74 assume that Sarnoff engineers working on the 1 1 the beginning of Disk Number 2. 2 project after Jody Lane is electrocuted wouldn't 2 BY MR. GOETTLE: 3 3 start from scratch, right? Q. I'm going to come back to the 4 A. It is not typical to start from 4 Sarnoff work we were just talking about, but I 5 scratch on a project with, when you have history 5 realized I left a couple of things hanging that I 6 in it. 6 meant to circle around earlier. 7 7 Q. So it seems like the engineers who A. Okay. 8 8 would be working on it after Jody Lane was Q. When we were talking about your job 9 electrocuted would be interested to see what 9 functions as chief technology officer at Power Sarnoff work had already been done, right? 10 10 Survey. 11 11 A. Yes. 12 Q. So, how would you go about finding 12 Q. One of the things that you mentioned 13 13 that you do is you educate the public and the that early work? A. You would talk to the people that industry on the dangers of stray voltage. 14 14 1.5 did the early work. 15 A. Yes. 16 Q. And, you or -- let me step back. 16 Q. What does that work entail? 17 17 Now, let's just talk about how the A. I have given a number of talks at 18 engineer team was set up at Sarnoff to work on 18 technical symposia. I spoke in front of the 19 the project after Jody Lane was electrocuted. 19 National Safety Council; I may not have that 20 You led that team; is that right? 20 right, in NCS, NSC, I don't -- but it was a, 21 A. To do the, the development work, I 21 something like that. 22 led a team to develop a contact voltage testing 22 Q. Uh-huh. 23 solution for Con Edison after Jody Lane was 23 A. And I have spoken in front of 24 electrocuted. 24 regulatory bodies and legislative bodies. And at Page 75 Page 77 1 Q. Okay. Who was on your team? 1 conferences for regulators. 2 A. There was quite a few people on the 2 Q. And you say you spoke in front of team. At that point in time, that initial 3 3 legislative bodies and regulatory bodies? 4 project, there would have been technicians, I 4 A. Uh-huh. 5 think there were two, two engineers that I worked 5 Q. And what is the purpose of speaking 6 with. Peter Zalud comes to mind. 6 in front of those bodies? 7 7 Q. What was his role? A. To educate them on the concerns for 8 A. Peter was a, had a lot of experience 8 contact voltage, the dangers and hazards. Public 9 with mathematical analysis. 9 safety risks. 10 Q. So, how did he use that experience 10 Q. And is that work, is the goal of 11 with mathematical analysis to help you on the 11 that work to get legislation and regulations 12 project? 12 adopted to regulate --13 A. He would, he would take sensor data 13 A. There are times when, when my talks 14 and use mathematical models to, you know, to help 14 are oriented towards, you know, persuading 15 turn that into, you know, signal, signal data. 15 regulators and legislators to make stray voltage 16 Q. Okay. We have to stop so he can 16 a topic of their regulations or their laws. 17 change out the tape. 17 Q. And why do you do that? 18 THE VIDEOGRAPHER: The time now is 18 A. The contact voltage is a serious 19 11:13, we are going off the record. This is 19 safety hazard, and to the extent that I can 20 the end of Disk Number 1. 20 educate these folks and they can do their job to 21 21 (Recess taken -- 11:13 a.m.) provide the public safety, you know, associated 22 22 (After recess -- 11:26 a.m.) with power distribution, then that is a big part 23 THE VIDEOGRAPHER: The time now is 23 of my goal. 11:26, we are back on the record. This is 24 24 Q. Any other reason that you did that?

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A. You know, at the end of the day, contact voltage is a serious safety concern. I will give you an example.

So, in spring, in the spring of 2013 a young girl named Jayden Hicks was shocked; she was, this was in Salina, Kansas. And she was playing in the rain. And she stepped in a puddle that was near a junction box for a street lighting circuit and Jayden was ten years old and she was electrocuted. So she fell down on that street and when people tried to help her they couldn't because when they touched her they got shocked.

Q. Uh-huh.

1.5

- A. So, they called the fire department and a few minutes later the fire department got a fiberglass pole and they pulled Jayden off of that structure.
  - Q. Uh-huh.
- A. And they sent her to the hospital and Jayden was in a coma. So, with contact voltage, you know, being my issue and my concern for contact voltage, I thought, you know, how can I help?

### voltage.

- Q. I appreciate that.
- A. That is, that is what I do.
- Q. So, when was the last time that you, that you presented to any regulators or legislators?

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- A. It was a few years ago. I would say 2011, 2012, I believe that was the last conference I did for that effort.
- Q. Are you the only employee of Power Survey or any person at Power Survey that does those types of presentations to legislators or regulators?
  - A. No one is doing that right now.
- Q. Nobody is doing that right now?
- 16 A. Yes, we, we are not currently pursuing regulations at this moment.
  - Q. Okay. But when Power Survey is pursuing regulations or legislations, are you the only one that goes around and presents?
    - A. When we are or when we were?
  - Q. When you were. When Power Survey was.
    - A. When we were pursuing regulations

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There was a website on Facebook called Prayers For Jayden and I thought how could I help with my expertise.

So, I took a team and I took one of our trucks to Salina, and I didn't, you know, I didn't approach anyone for a contract or any funding or anything. And I scanned the entire town of Salina. And I found a number of things that were energized and at some point I got to the ball field. You know, they had a big complex, a lot of baseball fields, and I thought of Deanna Green and I actually took my truck and checked all of the fences and the lighting in the ball field. And I gave that information to the city officials and they fixed whatever was wrong there. And I thought if that was my piece that could help that town heal because of what happened to Jayden, then that is, you know, that is important to me.

December 31st, 2013, Jayden passed away from her injuries and, and, that is why I have to educate everyone about finding every last contact voltage hazard so that my kids and your kids are kept safe from, safe from contact

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and legislation, we had a regulatory affairs person who really spearheaded that.

- Q. So, that regulatory person aside from you in 2011 or 2012, that regulatory person is the only Power Survey person going around and presenting to legislators and regulators?
  - A. No, no, no.

MR. EVENS: Objection, lack of foundation, misstates testimony. With that you can answer.

THE WITNESS: We had a regulatory affairs VP and she arranged, she would talk, she would meet with regulators, she would meet with officials, and occasionally I would accompany her and provide sort of the technical speech or the, you know, the speech on the hazards of contact voltage and why it is important to, you know, do it.

BY MR. GOETTLE:

- Q. What is her name?
  - A. Connie Hughes.
- Q. So, Connie, either alone or with you is the only person at Power Survey that would go around and meet with regulators or legislators

21 (Pages 78 to 81)

	Page 82		Page 84
1	about contact voltage?	1	A. Yes. I am not intimately involved
2	A. Is the only person I believe at	2	in I'm not the source of every proposal. So,
3	times Tom Catanese may have been involved in	3	I can't speak as to exactly what proposals have
4	those meetings.	4	gone out.
5	Q. Anybody else?	5	Sometimes proposals are just
6	A. I don't believe other Power Survey	6	boilerplate, you know, with updated client
7	employees were attending those meetings.	7	information and pricing. And I don't get
8	Q. When was the last time, to your	8	involved in that.
9	understanding, anybody at Power Survey met with	9	Q. Okay. So, the last one that you
10	regulators or legislators, or presented to	10	were involved with was within the last few
11	regulators or legislators about contact voltage?	11	months; is that right?
12	A. It was quite some time ago. It had	12	A. I may have had some cursory
13	to be in the '11, '12, time frames, somewhere	13	involvement but I haven't done any, you know,
14	back then.	14	serious, you know, heavy duty editing of
15	Q. 2011?	15	technical content in the last few months.
16	A. Yes.	16	I'm not saying that proposals
17	Q. Or 2012?	17	haven't gone out with my content, but once you
18	A. Somewhere in those time frames, yes.	18	have a template, then, those proposals will flow
19	Q. So I take it from that answer that	19	based on that.
20	it would either be late 2011 or early 2012 would	20	Q. I see. So, since the filing of this
21	have been the last time?	21	lawsuit in September of 2013, you think that you
22	MR. EVENS: Objection.	22	have been involved in writing a portion of a
23	THE WITNESS: That is far too	23	response to an RFP?
24	specific for me to recall.	24	A. Yes.
24	specific for the to recall.	24	n. 165.
	Page 83		Page 85
1	BY MR. GOETTLE:	1	Q. How many?
2	Q. It could have been anywhere in 2012.	2	A. Small numbers.
3	You really can't recall?	3	Q. Less than five?
4	A. I, without a calendar and looking at	4	A. Likely.
5	my travel history it would be hard for me to pin	5	Q. Could actually be more than five,
6	a date as to exactly when this stuff happened.	i .	
U	a date as to exactly when this start happened.	6	though?
7	Q. Are you involved at all in		
1	· · · · · · · · · · · · · · · · · · ·	6	though?
7	Q. Are you involved at all in	6 7	though?  A. You know, I don't track that.
7 8	Q. Are you involved at all in responding to requests for proposals regarding	6 7 8	though?  A. You know, I don't track that.  Q. Right.
7 8 9	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?	6 7 8 9	though?  A. You know, I don't track that.  Q. Right.  A. It would be hard for me to put a
7 8 9 10	<ul><li>Q. Are you involved at all in responding to requests for proposals regarding contact voltage?</li><li>A. Yes.</li></ul>	6 7 8 9 10	though?  A. You know, I don't track that.  Q. Right.  A. It would be hard for me to put a number on it.
7 8 9 10 11	<ul><li>Q. Are you involved at all in responding to requests for proposals regarding contact voltage?</li><li>A. Yes.</li><li>Q. What do you do in that work?</li></ul>	6 7 8 9 10 11	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you
7 8 9 10 11 12	<ul> <li>Q. Are you involved at all in responding to requests for proposals regarding contact voltage?</li> <li>A. Yes.</li> <li>Q. What do you do in that work?</li> <li>A. The program description that is</li> </ul>	6 7 8 9 10 11 12	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might
7 8 9 10 11 12	<ul> <li>Q. Are you involved at all in responding to requests for proposals regarding contact voltage?</li> <li>A. Yes.</li> <li>Q. What do you do in that work?</li> <li>A. The program description that is within the proposal, technical, the technical</li> </ul>	6 7 8 9 10 11 12 13	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of?
7 8 9 10 11 12 13	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility.	6 7 8 9 10 11 12 13 14	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes.
7 8 9 10 11 12 13 14 15	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that	6 7 8 9 10 11 12 13 14 15	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't
7 8 9 10 11 12 13 14 15	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?	6 7 8 9 10 11 12 13 14 15 16	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well.
7 8 9 10 11 12 13 14 15 16	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes.  Q. What do you do in that work?  A. The program description that is within the proposal, technical, the technical elements of it are my responsibility.  Q. And so you write, you write that part of your response?  A. I write the technical components.	6 7 8 9 10 11 12 13 14 15 16 17	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power
7 8 9 10 11 12 13 14 15 16 17	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?  A. I write the technical components. Q. When was the last time that you did	6 7 8 9 10 11 12 13 14 15 16 17	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power Survey also bid to perform stray voltage
7 8 9 10 11 12 13 14 15 16 17 18	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?  A. I write the technical components. Q. When was the last time that you did that?	6 7 8 9 10 11 12 13 14 15 16 17 18	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power Survey also bid to perform stray voltage detection? Or is that, is bidding the same thing
7 8 9 10 11 12 13 14 15 16 17 18 19 20	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?  A. I write the technical components. Q. When was the last time that you did that?  A. Well, our proposal efforts are	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power Survey also bid to perform stray voltage detection? Or is that, is bidding the same thing as responding to go an RFP?
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?  A. I write the technical components. Q. When was the last time that you did that?  A. Well, our proposal efforts are as-needed. I would say a few months ago was the	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power Survey also bid to perform stray voltage detection? Or is that, is bidding the same thing as responding to go an RFP? A. A large utility will supply a RFP,
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. Are you involved at all in responding to requests for proposals regarding contact voltage?  A. Yes. Q. What do you do in that work? A. The program description that is within the proposal, technical, the technical elements of it are my responsibility. Q. And so you write, you write that part of your response?  A. I write the technical components. Q. When was the last time that you did that?  A. Well, our proposal efforts are as-needed. I would say a few months ago was the last proposal. Last proposal that went out.	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	though?  A. You know, I don't track that. Q. Right. A. It would be hard for me to put a number on it. Q. And even aside from the ones you know about, there could be others that you might not even be aware of? A. Yes. Q. Okay. Now, aside from, I don't really understand the business all that well. So, aside from responding to RFPs, does Power Survey also bid to perform stray voltage detection? Or is that, is bidding the same thing as responding to go an RFP? A. A large utility will supply a RFP, and the response from Power Survey will be a, if

	Page 86		Page 88
1	Q. I see.	1	stuff.
2	A. So the bid is an answer to an RFP.	2	We just talked briefly about Peter
3	A bid contains a proposal.	3	Zalud
4	Q. And is that, is the process	4	A. Yes.
5	different for smaller utilities?	5	Q as Peter being involved with the
6	A. The process is dictated by the	6	stray voltage study after Jody Lane was
7	customer and it can vary.	7	electrocuted.
8	Q. I see. So, when you are not	8	MR. EVENS: Object to the extent it
9	responding to a bid, because it is a smaller	9	mischaracterizes the testimony.
10	customer, what, how do you request the work? How	10	THE WITNESS: Peter Zalud was an
11	does Power Survey, I should say, how does Power	11	engineer that worked with me on my, on my
12	Survey find out about the work and make a request	12	early efforts in mobile stray voltage
13	or submit a proposal?	13	detection.
14	MR. EVENS: Objection, lack of	14	BY MR. GOETTLE:
15	foundation. And may be beyond the witness'	15	Q. And he devised a way to take sensor
16	competence.	16	data and use math models to help turn that data
17	THE WITNESS: We are sometimes	17	into signal data; is that right?
18	contacted by customers, you know, saying they	18	A. I don't, I don't believe, I don't
19	have a problem. Or sometimes we will reach	19	believe that wording is exactly right.
20	out to the various utilities and suggest that	20	So, Peter Zalud would take data that
21	we meet and perform demonstrations.	21	I was capturing with the sensor system and run it
22	BY MR. GOETTLE:	22	through mathematical models at my request to find
23	Q. Has that activity been going on	23	the components of the signal I was interested in.
24	since the filing of this lawsuit in September,	24	Q. Okay. So the sensor would sense an
	Page 87		Page 89
1	2013?	1	electric field.
2	A. Yes.	2	A. Yes.
3	Q. And you have personally been	3	Q. Okay. And from that would generate
4	involved in that type of activity?	4	a signal; is that right?
5	A. Yes.	5	A. Our sensor system sensed an electric
6	Q. How many times would you estimate?	6	field. Our sensor system captured that electric
7	A. A few. A few trips here or there.	7	field, and through our, through our analysis and
8	Q. Less than five?	8	system we would find an indication that there was
9	A. Maybe around four or five.	9	electric field present there which was in our
10	Q. Okay. Do you have an understanding	10	case associated with an energized structure or
11	of whether Premier has also been doing the same	11	service.
	toward a Calcium a middle along a many acceptance on their	12	Q. And that process at least in part
12	types of things with the same customers in this	1	
12 13	time period after the filing of the complaint in	13	was figured out by Peter Zalud?
	• •	13 14	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured
13	time period after the filing of the complaint in	1	was figured out by Peter Zalud?
13 14	time period after the filing of the complaint in September of 2013?	14	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured
13 14 15	time period after the filing of the complaint in September of 2013? A. Myself, I don't have a great sense	14 15	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of
13 14 15 16	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with	14 15 16	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know,
13 14 15 16	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with my recent visits to customers.	14 15 16 17	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of
13 14 15 16 17 18	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with my recent visits to customers.  Q. Would it surprise you if you learned	14 15 16 17 18	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of getting from an energized structure to a user,
13 14 15 16 17 18	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with my recent visits to customers.  Q. Would it surprise you if you learned that Premier was also contacting those same	14 15 16 17 18 19	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of getting from an energized structure to a user, usable indication output.
13 14 15 16 17 18 19	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with my recent visits to customers.  Q. Would it surprise you if you learned that Premier was also contacting those same customers?	14 15 16 17 18 19 20	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of getting from an energized structure to a user, usable indication output.  Q. And it, the part of the process
13 14 15 16 17 18 19 20 21	time period after the filing of the complaint in September of 2013?  A. Myself, I don't have a great sense of Premier's activity with, in association with my recent visits to customers.  Q. Would it surprise you if you learned that Premier was also contacting those same customers?  A. It would not surprise me if Premier	14 15 16 17 18 19 20 21	was figured out by Peter Zalud?  A. I can't say that Peter Zalud figured out the process. The process was part of a, you know, an engineering sequence that I, you know, it was an engineering task along the way of getting from an energized structure to a user, usable indication output.  Q. And it, the part of the process involved finding components of the signal that

#### Page 90 Page 92 1 off of the sensor and to generate data plots of 1 into frequency and amplitude components. 2 the various amplitudes, frequencies, that were 2 BY MR. GOETTLE: coming from the energized structure. 3 Q. Okay. Would that process of 3 4 Q. So his role was devising a way to 4 separating into frequency at an amplitude 5 have these plots generated, the plots of 5 components involve using filters? 6 amplitudes and frequencies. 6 A. There are many components that make 7 MR. EVENS: Objection, asked and 7 up the system and I think the term filter needs 8 answered. 8 better definition in this paradigm. 9 THE WITNESS: I, I am not sure I 9 Within the mathematical model there 10 agree with the term devising. I think I 10 are mathematical models of filters. 11 explained what Peter did. So to the extent that one could or 11 12 BY MR. GOETTLE: 12 may employ a mathematical model of a filter to 13 Q. Okay. Look I'm not trying to try to 13 change the mathematical computation that one is 14 paint you in the a corner or anything. I'm 14 working with, one could use a mathematical filter 15 really trying to understand what Peter Zalud's, I 15 as part of that process. 16 keep writing down, I've written down three of 16 Q. Did that process involve using fast 17 your answers I think verbatim, and I'm trying to 17 Fourier transform? 18 make sure I have internalized it and I'm trying 18 A. I don't recall the exact tools that 19 to use the words back to you and I'm not getting 19 Peter used in that tool box. 20 it right. So let me try it again? 20 Q. Do you recall whether it would 21 A. Okay. 21 involve using an amplifier? 22 MR. EVENS: Dan, with that, if he 22 A. In a mathematical model, an 23 has answered it and you wrote it down then 23 amplifier is just a math function. 24 there is no further question to then restate 24 So, to the extent that math Page 91 Page 93 1 functions like that exist, it is hard to say 1 what it is that Peter Zalud has done. MR. GOETTLE: Mark, I don't 2 whether they were used or not. But in that 2 3 understand what you are doing right now. 3 paradigm, it is just a multiply. 4 4 MR. EVENS: I am objecting to you Q. Okay. And then in developing this ask the same question four or five times. 5 system as part of your, the engineering work that 5 MR. GOETTLE: Object and state the 6 you supervised, how did you use the mathematical 6 7 7 reason and let me continue. models that Peter came up with? MR. EVENS: You have given a reason 8 A. The understanding of the signals 9 and it makes no sense within justifying 9 that were coming from the energized structures 10 continuing to ask the same question over and 10 forms the basis for how we program digital signal 11 processors to then implement our intended 11 over. 12 12 BY MR. GOETTLE: functionality. 13 13 Q. So, was Peter Zalud's participation Q. You used the mathematical models 14 on your team, his role was to figure out how to 14 that Peter Zalud came up with in order to figure 15 generate plots of the amplitudes and frequencies 15 out how to perform the digital signal processing 16 of the detected signals. 16 in the device? MR. EVENS: Objection, 17 17 MR. EVENS: Same objection, asked 18 and answered. And it may be a 18 mischaracterizes the testimony. 19 mischaracterization of the testimony. 19 BY MR. GOETTLE: 20 With that you can answer. 20 Q. Is that right? 21 THE WITNESS: So, Peter would take 21 A. There is a design process when you 22 the sensor data that I captured off of the 22 are, when you are trying to build an instrument 23 prototype sensor system, and he would use 23 that has, that uses those techniques and skills mathematical models to separate that signal 24 in an iterative process. 24

#### Page 94 Page 96 So, so you use, you use what you, 1 way to refer to the sensor probe? Like, how do 1 2 you start with your data. You mathematically 2 you refer to that device? model some computations you would eventually like 3 3 A. I refer to it as a sensor probe. to do in a DSP. And when you are happy with the 4 4 · Q. Okay. So, did it ever, did you ever 5 results, you try it in your DSP. 5 consider using a already commercially available 6 6 Q. Okay. And if it doesn't work in the sensor probe rather than designing your own? 7 7 DSP then you would go back and adjust the A. My experience with some commercial 8 8 mathematical models in this iterative process equipment led me to believe that the 9 9 that you have referenced? sensitivities of those products and the A. You often use the mathematical 10 10 specifications that came with them, that they 11 simulation because it gives you the flexibility 11 were not sensitive enough for this, for this to take one set of data and experiment with it. 12 12 application. 13 13 Q. Okay. So, aside from Peter Zalud, Q. Do you recall any of the probes that 14 who else worked on the project after Jody Lane 14 you were already familiar with at that time? 15 was electrocuted? 15 A. I remember something that said --16 what was the name of that company. We had a lot 16 A. I had guys that designed circuit 17 boards. I had guys that, technicians that put 17 of test equipment at Sarnoff. And, I know there 18 together hardware. Names, that initial effort 18 were electric and magnetic field probes that I 19 19 was reasonably small. had used. 20 I know, I know, what is that stuff. 20 I remember Larry Mackey put together 21 a lot of hardware. 21 I remember a big suitcase. 22 22 Q. MA---Q. Fair enough. 23 23 A. M-A-C-K-E-Y, or M-A-C-K-E-Y, A. Yeah, I ---24 perhaps. There was another engineer, too, that 24 Q. It was a while ago? Page 95 Page 97 programmed stuff. He programmed, I'm trying to 1 A. Yes, yes. 1 think of his name. It will come to me, but it is 2 Q. Did you ever consider using Narda's 2 3 EFA-300? 3 not coming to me right now. A. No. 4 4 Q. Okay. Fair enough. How far into 5 5 O. How come? the project were you before you decided that you were going to use electric field detection to 6 A. I had to do fundamental development 6 7 7 work. So, I needed to see, I needed to see the find these stray voltages? 8 MR. EVENS: Objection, lack of 8 whole signal. I needed control over all of the 9 circuitry. 9 foundation. 10 10 My background in antennas and THE WITNESS: That was --11 circuit design, and my early prototyping, you 11 MR. EVENS: Go ahead, you can 12 know, told me that I needed a, that I would get 12 answer. 13 the best performance from a specifically purposed 13 THE WITNESS: Electric field was, 14 when I got involved, the electric field was 14 design. 15 my first priority or, you know, first 15 Q. Were you aware of the EFA-300 at 16 that time? 16 thought, the first concept that I thought 17 17 would be useful based on what I knew and A. No. 18 based on the prior work that showed that that 18 Q. I may have already asked you this, 19 but, do you recall who it was from Con Ed that 19 streetlight had an electric field signature. 20 20 came to Sarnoff? BY MR. GOETTLE: 21 Q. Did you ever consider using any 21 A. I don't. 22 electric field meters that were already, or --22 Q. At that time had you heard of the company called Wandel & Goltermann? 23 23 let me step back in terminologies. Is electric field meter the right 24 A. No. 24

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Q. Okay. So, can you, now we are going to go along in the timeline. Can you talk to me and describe to me how you went about developing, I guess, I think you have referred to it as a prototype, maybe, your first system, how did that development take place? How did it progress?

A. So Con Ed had made the general request that they needed help finding stray and contact voltage in their system. After Jody Lane was killed there was an urgency to have a system that would work rapidly, accurately and cover a lot of ground.

So, we said we would work, we proposed to do a mobile system, something that could be, that could move quickly. And we proposed that we would use electric field detection to effect that means. And we started out with early sensors that had basically signal capture capabilities, some amplification, some signal capture capabilities, and we operated those on some test sites that we had built.

We characterized the signals that were coming from those and we worked on, we worked on hardware designs and software designs Page 100

- A. So, depending upon, on our documentation Sarnoff was R&D style.
- So, whoever was working on a particular project had it on their computer. And hopefully, hopefully, you maintain that stuff if that project was of interest to you, because it is not uncharacteristic for generation loss, let's call it.
  - Q. Uh-huh.
  - A. Every time somebody gets a new PC.
  - Q. Did any of that R&D style

documentation come over with you to Power Survey?

- A. I don't think the early, the early stuff lasted through that. And if it had, and it was on paper, then we lost it in 2012 when Sandy flooded our facility.
  - Q. No kidding.
- A. I had five feet of water in our facility. So, I had, you know, I had no office for six months after that.
- Q. Brutal. If I could get you to turn to, let's go to Paragraph 7, on Page 3 of your Declaration, Kalokitis 1.
  - A. Yes.

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to effect that means.

- Q. And do you recall who did the software design?
- A. I laid out a lot of the parameters to what, you know, what was important, you know, to find what signals were important to find and what were interesting.

There was another fellow that did the programming, I mentioned earlier, I still haven't come up with his name, but he programmed a lot of the DSP stuff.

So we started out with a prototype board, a DSP board and we programmed it, tried programs on it, and, iteratively worked on that as part of the effort.

- Q. Do you recall who had worked on the hardware design?
- A. Dennis, Dennis -- there was a guy named Dennis that worked on it. He did circuit board layouts.
- Q. Somebody with the first name of Dennis?
  - A. Yes.
  - Q. Okay. How was the work documented?

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- Q. Just a couple of terminology things.
   We have talked a lot today about contact voltage and stray voltage. At least those are terms I have been using.
  - A. Yes.
  - Q. And, I wanted to make sure that I have a good understanding of what stray voltage means in this context.

And I think I found a way to short circuit this discussion on the train ride down.

Do you agree with, I'm not sure of the expert's, how to pronounce it, it is either Fugate or Fugate. You have talked to your technical expert that was hired in this case?

- A. I have spoken to Fugate.
- Q. Fugate. In his, and I can pull it out and show it to you if you want, but I just want to see if you agree.

In his Declaration he says that stray voltage is un -- quote, "Undesired voltages on conducting objects resulting from leakage of electric power from the lines."

- A. Could I see that document.
- Q. Absolutely.

26 (Pages 98 to 101)

#### Page 104 Page 102 1 Q. I just want to know you have used 1 MR. EVENS: I was just about to note the term stray voltage in your patents, right? 2 2 an objection unless you show the witness a 3 3 A. I use the term stray voltage in the document. BY MR. GOETTLE: 4 pátents, I believe that is correct. 4 5 Q. And I just want to know what does it 5 Q. Well, you know what, I'm going to show you the document. I have no problem doing 6 mean, what does stray voltage mean in that 6 7 that. I just, but my question is just, I mean, 7 context? 8 A. Stray voltage in the context --8 do you think that this is a reasonable --9 MR. EVENS: I'm going to instruct 9 stray voltage is the broader term. At the time 10 that was written, it was the common term and 10 him not to answer unless he sees the quote. 11 maybe the only term in common use, for a voltage 11 MR. GOETTLE: You are instructing a on something whose source was unknown or at least 12 12 witness not to answer a question that is not 13 unknown to the observer at the moment. 13 privileged? Really? Really? 14 MR. EVENS: Here, let me state, my 14 So, if you found an object, we 15 talked about streetlights earlier, if the you 15 objection is this: I want to ensure that 16 found an object with, if you found a streetlight 16 what you are reading is complete. So we 17 with 20 volts on the outside of it in 2004, you 17 would like to see the document. 18 BY MR. GOETTLE: 18 would say it had stray voltage on it in 2004. 19 Q. Assuming that, let's assume that the 19 Q. I'm going to show you the document. 20 light is off. I actually get a little confused 20 I'm going to show you the document. Do you if the light is on, because I don't know. 21 agree, though, before I do, that stray voltage is 21 22 undesired voltages on conducting objects 22 A. The light being on or off is 23 23 irrelevant. resulting from leakage of electric power from the 24 Q. It is? 24 lines? Page 103 Page 105 1 A. I would say that the definition of 1 A. Yes. 2 stray and contact voltage varies with the 2 But there is voltage at the bulb, 3 3 right? audience and the time that you are using the A. If the light is on? 4 4 term. 5 5 And a lot of confusion surrounds O. Yes. 6 A. Generally there is voltage at the 6 those terms to this day, and I may, depending on 7 7 bulb, yes. There would be voltage at the bulb if the audience, use one or the other and depending 8 8 on the time one or the other has been used. the light was on. 9 9 Q. But you would not call that stray So, it is very difficult to nail 10 10 that one down. voltage? 11 Q. So, stray voltage can have different 11 A. No, you would not. 12 meanings in different contexts? Q. So, your example, you mean the light 12 13 13 pole? A. Yes. 14 Q. What would be the context, what 14 Correct. 15 Q. Would it be correct to think about 15 would be the meaning of stray voltage in the 16 stray voltage as a voltage that is, like you 16 context of your patents? MR. EVENS: To the extent you can 17 wouldn't expect to be there or shouldn't be 17 18 18 answer without looking specifically at the there? 19 patents, for context. 19 A. You would, you would characterize, 20 again, you know, the use of the term stray or 20 MR. GOETTLE: Mark, you are 21 contact voltage has a temporal component, it has 21 coaching, please stop. 22 THE WITNESS: What would be the 22 an audience component, and, I can use it a number 23 of different ways depending upon the time and the 23 context, I'm sorry, say the question again. 24 place in the audience. 24 BY MR. GOETTLE:

	Page 106		Page 108
1	And, it is, it is something that the	1	a little bit, unless somebody else's stomach
2	industry struggles with today. They struggle to	2	is growling.
3	put a proper definition on it, not only the	3	BY MR. GOETTLE:
4	industry but the public, the regulators and the	4	Q. I mean, when you are having this
5	media all have this same struggle.	5	much fun, you know. Let's do this. The exhibit
6	So, I, I don't like to pin the term	6	has been marked. I'm going to direct your
7	unless I know the audience and the time it is	7	attention because I actually don't even have a
8	being used. Because it changes.	8	question for you from this, but I promised you I
9	Q. Okay. But I'm only talking about in	9	would give this to you and I felt like it would
10	the context of your patents, in your invention.	10	look bad if I didn't.
11	In your invention would stray	11	A. Okay.
12	voltage, would that phrase stray voltage indicate	12	Q. I'm going to direct your attention
13	a voltage that would be unexpected? Is that a	13	to the paragraph that I read from.
14	way of thinking about it?	14	A. Okay.
15	A. My patents are for, the invention in	15	.Q. About what Dr. Fugate says stray
16	the system is for a system that finds voltage at	16	voltage means.
17	a distance. Noncontact voltage at a distance on	17	A. Okay.
18	objects.	18	Q. And then I'm going to, with your
19	MR. GOETTLE: Would you mind marking	19	permission, we will just pull out the charts that
20	that one as Kalokitis 2.	20	are in the back and not include those as part of
21	(Kalokitis Exhibit Number 2	21	the exhibit.
22	marked for identification.)	22	A. Okay.
23	THE WITNESS: Sure.	23	Q. Okay. So, if you go to Paragraph
24	MR. EVENS: Dan, this is really your	24	25, and I will give you, it is a short one, so,
	Davis 107		
		1	Dage 100 I
	Page 107		Page 109
1	issue not ours. But there are parts of the	1	if you want to just read it.
2	issue not ours. But there are parts of the Fugate Declaration that I think are	2	if you want to just read it.  A. Okay. Okay. I read it.
2 3	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may	2 3	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?
2 3 4	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about	2 3 4	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray
2 3 4 5	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this.	2 3 4 5	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray
2 3 4 5 6	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle	2 3 4 5 6	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that
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2 3 4 5 6 7 8	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the	2 3 4 5 6 7 8	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from
2 3 4 5 6 7 8 9	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces	2 3 4 5 6 7 8 9	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.
2 3 4 5 6 7 8 9	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that	2 3 4 5 6 7 8 9	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?
2 3 4 5 6 7 8 9 10	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this.  MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client.	2 3 4 5 6 7 8 9 10	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So
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2 3 4 5 6 7 8 9 10 11 12	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client.  THE WITNESS: I was just going to get up and get a bottle of water if you don't	2 3 4 5 6 7 8 9 10 11 12 13	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So  A. One of the things stray voltage refers to, among other things that it refers to
2 3 4 5 6 7 8 9 10 11 12 13 14	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client. THE WITNESS: I was just going to get up and get a bottle of water if you don't mind.	2 3 4 5 6 7 8 9 10 11 12 13 14	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So  A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on
2 3 4 5 6 7 8 9 10 11 12 13 14	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client. THE WITNESS: I was just going to get up and get a bottle of water if you don't mind. MR. EVENS: You know what, I'm going	2 3 4 5 6 7 8 9 10 11 12 13 14 15	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So  A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects.
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client. THE WITNESS: I was just going to get up and get a bottle of water if you don't mind. MR. EVENS: You know what, I'm going to give you. MR. GOETTLE: Do you need a break? THE WITNESS: No, I'm good. MR. EVENS: Dan, lunch is ready if	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So  A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects.  Q. Okay. I think where my train of thought got sidetracked is where we were talking about the R&D style documentation.  Aside from the R&D style
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this. MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client. THE WITNESS: I was just going to get up and get a bottle of water if you don't mind. MR. EVENS: You know what, I'm going to give you. MR. GOETTLE: Do you need a break? THE WITNESS: No, I'm good. MR. EVENS: Dan, lunch is ready if you want a break.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	if you want to just read it.  A. Okay. Okay. I read it.  Q. Do you agree with Paragraph 25?  A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear?  Q. Okay. So  A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects.  Q. Okay. I think where my train of thought got sidetracked is where we were talking about the R&D style documentation.  Aside from the R&D style documentation, would there have been any other
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this.  MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client.  THE WITNESS: I was just going to get up and get a bottle of water if you don't mind.  MR. EVENS: You know what, I'm going to give you.  MR. GOETTLE: Do you need a break? THE WITNESS: No, I'm good. MR. EVENS: Dan, lunch is ready if you want a break.  MR. GOETTLE: Actually this is your	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	if you want to just read it.  A. Okay. Okay. I read it. Q. Do you agree with Paragraph 25? A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear? Q. Okay. So A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects. Q. Okay. I think where my train of thought got sidetracked is where we were talking about the R&D style documentation.  Aside from the R&D style documentation.  Aside from the R&D style documentation of the system that you were
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this.  MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client.  THE WITNESS: I was just going to get up and get a bottle of water if you don't mind.  MR. EVENS: You know what, I'm going to give you.  MR. GOETTLE: Do you need a break? THE WITNESS: No, I'm good. MR. EVENS: Dan, lunch is ready if you want a break.  MR. GOETTLE: Actually this is your deposition not mine, so, whenever you want to	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	if you want to just read it.  A. Okay. Okay. I read it. Q. Do you agree with Paragraph 25? A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear? Q. Okay. So A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects. Q. Okay. I think where my train of thought got sidetracked is where we were talking about the R&D style documentation.  Aside from the R&D style documentation, would there have been any other documentation of the system that you were developing for Con Ed back in the 2004 time
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	issue not ours. But there are parts of the Fugate Declaration that I think are confidential to your client. So you may MR. GOETTLE: Let me think about this.  MR. EVENS: You may want to handle this in a way that what you want to specifically refer to we pull out or when the reporter takes custody, we have the pieces that are confidential handled in a way that doesn't affect your client.  THE WITNESS: I was just going to get up and get a bottle of water if you don't mind.  MR. EVENS: You know what, I'm going to give you.  MR. GOETTLE: Do you need a break? THE WITNESS: No, I'm good. MR. EVENS: Dan, lunch is ready if you want a break.  MR. GOETTLE: Actually this is your	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	if you want to just read it.  A. Okay. Okay. I read it. Q. Do you agree with Paragraph 25? A. I will say that, that the term stray voltage so, one of the things that stray voltage refers to, but not the only thing that stray voltage refers to, is, was undesired voltage on conducting objects resulting from leakage of power systems at that time.  Is that clear? Q. Okay. So A. One of the things stray voltage refers to, among other things that it refers to at that point in time, is undesirable voltage on conducting objects. Q. Okay. I think where my train of thought got sidetracked is where we were talking about the R&D style documentation.  Aside from the R&D style documentation.  Aside from the R&D style documentation of the system that you were

	Page 110		Page 112
1	report to the customer.	1	lunch. That might be a good time.
2	Q. So, in your Declaration, at	2	THE VIDEOGRAPHER: The time now is
3	Paragraph 9 on Page 4, of Kalokitis 1.	3	12:22, we are going off the record.
4	A. Yes.	4	(Recess taken 12:22 p.m.)
5	Q. Was the first device that was built.	5	(After recess 12:58 p.m.)
6	this prototype that you describe in the first	6	THE VIDEOGRAPHER: The time now is
7	sentence, the trailer-mounted system?	7	12:58, we are back on the record.
8	A. Was the first device we built a	8	BY MR. GOETTLE:
9	trailer-mounted system, is that your question?	9	Q. Okay. So, just for the record,
10	Q. Yes.	10	housekeeping, what I would like to do is put in
11	A. Was the first device we built a	11	Kalokitis 2, which is, which will be a portion of
12	trailer-mounted system?	12	the Declaration of David Fugate. The Pages 1
13	So, the first, the first device that	13	through 10, the first 10 pages of that will be
14	I gave to Con Ed to test, for them to test, was a	14	Kalokitis 2.
15	trailer-mounted system.	15	MR. EVENS: That is fine. And as we
16	Q. And that is the prototype that is	16	talked earlier, subject, you know, given that
17	discussed there in Paragraph 9?	17	it is an incomplete document, but, I think
18	A. Yes.	18	for our purposes, that is fine.
19	Q. Okay. So but there was a device	19	BY MR. GOETTLE:
20	before that, or multiple devices before that?	20	
21	A. There was various bits of hardware	21	Q. Hello, so going back to your
22	that were duct taped together and used as	22	Declaration, Page 4, Paragraph 9.
23	development bits; I think that is a bad way to		A. Page 4, Paragraph 9, yes.
24	characterize our professional work.	23	Q. So, that refers to a prototype that
24	characterize our professional work.	24	you built and delivered to Con Ed in 2005?
		<u> </u>	
	Page 111		Page 113
1	Page 111 But, R&D, you know, you find a way	1	Page 113  A. Around 2005 we delivered a
1 2		1 2	
	But, R&D, you know, you find a way	1	A. Around 2005 we delivered a
2	But, R&D, you know, you find a way to make things work.	2	A. Around 2005 we delivered a trailer-mounted prototype.
2 3	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to	2	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing?
2 3 4	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a	2 3 4	A. Around 2005 we delivered a trailer-mounted prototype.  Q. You agree with that? That timing?  A. I believe it was around 2005; I
2 3 4 5	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?	2 3 4 5	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing? A. I believe it was around 2005; I agree it was around 2005.
2 3 4 5 6	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final report associated with the conclusion of a	2 3 4 5 6	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing? A. I believe it was around 2005; I agree it was around 2005. Q. Okay. I'm going to hand you you
2 3 4 5 6 7	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final	2 3 4 5 6 7	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing? A. I believe it was around 2005; I agree it was around 2005. Q. Okay. I'm going to hand you you want that one?
2 3 4 5 6 7 8	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final report associated with the conclusion of a project.	2 3 4 5 6 7 8	A. Around 2005 we delivered a trailer-mounted prototype.  Q. You agree with that? That timing?  A. I believe it was around 2005; I agree it was around 2005.  Q. Okay. I'm going to hand you you want that one?  MR. EVENS: No, no you need to keep
2 3 4 5 6 7 8 9	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final report associated with the conclusion of a project.  So my expectation is that we wrote a	2 3 4 5 6 7 8	A. Around 2005 we delivered a trailer-mounted prototype.  Q. You agree with that? That timing?  A. I believe it was around 2005; I agree it was around 2005.  Q. Okay. I'm going to hand you you want that one?  MR. EVENS: No, no you need to keep that one.
2 3 4 5 6 7 8 9	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final report associated with the conclusion of a project.  So my expectation is that we wrote a final report associated with that. And we, yes,	2 3 4 5 6 7 8 9	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing? A. I believe it was around 2005; I agree it was around 2005. Q. Okay. I'm going to hand you you want that one? MR. EVENS: No, no you need to keep that one. MR. GOETTLE: You get that one.
2 3 4 5 6 7 8 9 10	But, R&D, you know, you find a way to make things work.  Q. When the prototype was delivered to Con Ed around 2005, would there have been a report prior to that, delivered to Con Ed?  A. Our typical format was a final report associated with the conclusion of a project.  So my expectation is that we wrote a final report associated with that. And we, yes, I mean that would be our normal process.	2 3 4 5 6 7 8 9 10	A. Around 2005 we delivered a trailer-mounted prototype. Q. You agree with that? That timing? A. I believe it was around 2005; I agree it was around 2005. Q. Okay. I'm going to hand you you want that one? MR. EVENS: No, no you need to keep that one. MR. GOETTLE: You get that one. MR. EVENS: I get that one. You get
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	Page 114		Page 116
1	Q. Do you recognize this patent	1	A. No, that is Frank Lang.
2	application?	2	Q. Also an inventor listed here?
3	A. It looks familiar. Yes.	3	A. Yes.
4	Q. This is the first patent	4	Q. Okay. So let's focus on
5	application, this is a provisional patent	5	Mr. Berends. He did the DSP processing for the
6	application, but this was the first patent	6	prototype system?
7	application that was filed with respect to your	7	A. He programmed the DSP, yes.
8	work on stray voltage for Con Ed, right?	8	Q. So, could you pretend again I'm a
9	A. Yes. Yes.	9	10th grader and tell me what it is that David
10	Q. Okay. And then referring to your	10	brought to your prototype system?
11	Declaration at Paragraph 10.	11	A. David knew DSP programming and
12	A. Yes.	12	signal processing. So, he was, they were some of
13	Q. This is the, Paragraph 10 refers to	13	his talents.
14	a patent application filed starting in December,	14	Q. And why did you need his talents for
15	2004.	15	this Con Ed system?
16	A. I see that.	16	MR. EVENS: Object to the form of
17	Q. And that, is that a reference to	17	the question. Lack of foundation.
18	Kalokitis 3?	18	THE WITNESS: I had a broad, I had a
19	A. Yes.	19	•
20	Q. Okay. So, this Kalokitis 3, the	l	big team at Sarnoff; we always worked in
21	provisional patent application was filed	20	teams whenever we could. And, you know, you
22	December 23, 2004. Right?	21	select some team members, and more work than
23	A. This document says December 23,	22	one person can handle.
24	2004.	23	BY MR. GOETTLE:
2 4	2004.	24	Q. Okay. It was an ill-formed
	Page 115		Page 117
1	Q. Okay. And, if you, if you want to	1	question.
2	review it please feel free, but this is a	2	A. Okay.
3	documentation of the system that you developed	3	Q. What was, what DSP programming did
4	for Con Ed, right?	4	he do for the prototype?
5	A. Yes. Yes.	5	A. He programmed the DSP system,
6	Q. So, what I would like to do is turn	6	whatever it was, back in the day. He programmed,
7	to the front of the document and look at the	7	he wrote the code for the DSP.
8	inventors that are listed there.	8	Q. So, if you look in the provisional
9	A. Okay.	9	patent application, the '054 application to
10	Q. I just want to walk through these	10	Figure 2.
11	inventors and find out if you have a recollection	11	A. Yes.
12	of their contribution to the invention and where	12	Q. Would there be one or more boxes to
13	they are now.	13	Figure 2 that would roughly correspond to the
14		14	work that David Berends did?
15	•	15	A. You know, that is a complicated
16	Q. So, you are the first named	16	question. We typically sat down with a patent
	inventor, right?	17	attorney and described what we did and, you know,
1	A. Correct.	18	things were associated from there.
17	O And then most is David Danard		unites were associated from there.
17 18	Q. And then next is David Berends.	1	<del>-</del>
17 18 19	A. David Berends, yes.	19	Q. So, looking at Figure 2, you can't
17 18 19 20	<ul><li>A. David Berends, yes.</li><li>Q. Who is David Berends?</li></ul>	19 20	Q. So, looking at Figure 2, you can't tell me whether the digital signal processing is
17 18 19 20 21	<ul><li>A. David Berends, yes.</li><li>Q. Who is David Berends?</li><li>A. David Berends did the DSP</li></ul>	19 20 21	Q. So, looking at Figure 2, you can't tell me whether the digital signal processing is performed?
17 18 19 20 21 22	<ul><li>A. David Berends, yes.</li><li>Q. Who is David Berends?</li><li>A. David Berends did the DSP processing.</li></ul>	19 20 21 22	Q. So, looking at Figure 2, you can't tell me whether the digital signal processing is performed?  MR. EVENS: Objection, misstates his
17 18 19 20 21	<ul><li>A. David Berends, yes.</li><li>Q. Who is David Berends?</li><li>A. David Berends did the DSP</li></ul>	19 20 21	Q. So, looking at Figure 2, you can't tell me whether the digital signal processing is performed?

	Page 118		Page 120
1	contain a digital signal processor. So, you,	1	Sarnoff?
2	there is no DSP code to put anywhere in	2	A. He was.
3	Figure 2.	3	Q. Do you recall how long he, roughly
4	BY MR. GOETTLE:	4	he has been at Sarnoff?
5	Q. But, the digital signal processing,	5	A. Prior to my exit? I, I don't recall
6	would that be performed within the PC that is	6	when he started. I don't know how long he was at
7	shown in the lower right-hand corner?	7	Sarnoff.
8	A. I don't know that, without studying	8	Q. Would he have been in the microwave
9.	this document, I don't know the context of this	9	group?
10	block diagram. I don't know what it is	10	A. That is a good question. Was Dave
11	describing.	11	Berends in the microwave group? I believe he
12	Q. Okay.	12	was.
13	A. And I don't know its purpose in the	13	Q. Okay. How about, well, we have
14	text.	14	already talked about Peter Zalud, right?
15	So, I can't comment without studying	15	A. Uh-huh, yes.
16	it as to what this document is supposed to mean.	16	Q. How about Frank Lang? What was
17	It has been ten plus years.	17	Frank's contribution to this invention in the
18	Q. So, you don't, do you recall where	18	'054 patent application?
19	Figure 2 in this '054 patent application came	19	A. You know, the specifics about that
20	from?	20	again was something that we went over with the
21	A. Do I recall where it came from. I	21	patent attorneys to associate who belonged where
22	don't recall where it came from.	22	on these applications.
23	Q. Okay. How about Figure 3?	23	I can say that Frank was a, was a,
24	A. And honestly my previous comment, I	24	an analog signal, an analog circuits guy. And
	Dago 110		
	Page 119		Page 121
1	didn't see where the signal processing goes	1	Page 121 that is probably what I remember most about
1 2	·	1 2	•
	didn't see where the signal processing goes frankly because I missed the little PC in the corner.	ŀ	that is probably what I remember most about Frank.  Q. But, specifically to this project,
2	didn't see where the signal processing goes frankly because I missed the little PC in the corner.  So, a PC is certainly capable of	2	that is probably what I remember most about Frank.  Q. But, specifically to this project, for detecting stray voltage, you can't recall
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time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one expectation of what is out there.  Q. The proposal would be before the work and that is probably commenced?  A. I don't know, it has been quite some 10 A. Yes.  Q. And do you recall the thinking 11 Dehind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No.  Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054 application?  A. I don't know what the key differences are or what the intentions were. No, 1 don't recall.		touch. But, there may have been an e-mail or two	5	time to flip through it, but, do you recall this patent application?
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10 A. I don't know, it has been quite some 11 time since I spoke to him. 12 Q. Okay. Are you aware of any other 13 documentation of the system that you developed 14 for Con Ed regarding stray voltage that would 15 predate the '054 application? 16 A. Documentation that would like I 17 said before I expect there is a proposal for the 18 work. And that is probably the, my one 19 expectation of what is out there. 20 Q. The proposal would be before the 21 work actually commenced? 22 A. Correct. 20 A. Correct. 20 A. Yes. 21 Q. And do you recall the thinking 21 D. A. Yes. 21 A. Yes. 22 And do you recall the thinking 22 A. No. 23 A. No. 24 A. No. 25 A. No. 26 A. No. 27 A. No. 28 A. No. 29 A. I don't know what the key 21 differences are or what the intentions were. No, 22 I don't recall.	6 7	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your	5 6 7	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related
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A. Documentation that would like I  16 Q. Do you recall whether this patent  17 said before I expect there is a proposal for the  18 work. And that is probably the, my one  19 expectation of what is out there.  20 Q. The proposal would be before the  21 work actually commenced?  22 A. Correct.  16 Q. Do you recall whether this patent  17 application was divulging a further invention in  18 addition to what is disclosed in the '054  29 application?  20 A. I don't know what the key  21 differences are or what the intentions were. No,  22 I don't recall.	6 7 8 9 10 11 12	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed	5 6 7 8 9 10 11 12 13	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage? A. Yes. Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a
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work. And that is probably the, my one 18 addition to what is disclosed in the '054 19 expectation of what is out there. 20 Q. The proposal would be before the 21 work actually commenced? 22 A. Correct. 28 addition to what is disclosed in the '054 29 application? 20 A. I don't know what the key 21 differences are or what the intentions were. No, 22 I don't recall.	6 7 8 9 10 11 12 13 14	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?	5 6 7 8 9 10 11 12 13 14 15	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes.  Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes.  Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No.
expectation of what is out there.  20 Q. The proposal would be before the work actually commenced?  21 A. Correct.  19 application?  20 A. I don't know what the key  21 differences are or what the intentions were. No,  22 I don't recall.	6 7 8 9 10 11 12 13 14 15	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I	5 6 7 8 9 10 11 12 13 14 15 16	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes.  Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes.  Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No.  Q. Do you recall whether this patent
Q. The proposal would be before the work actually commenced? 21 differences are or what the intentions were. No, 22 A. Correct. 22 I don't recall.	6 7 8 9 10 11 12 13 14 15 16	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the	5 6 7 8 9 10 11 12 13 14 15 16	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes. Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No. Q. Do you recall whether this patent application was divulging a further invention in
<ul> <li>work actually commenced?</li> <li>A. Correct.</li> <li>differences are or what the intentions were. No,</li> <li>I don't recall.</li> </ul>	6 7 8 9 10 11 12 13 14 15 16 17	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one	5 6 7 8 9 10 11 12 13 14 15 16 17	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage? A. Yes. Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago? A. No. Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054
22 A. Correct. 22 I don't recall.	6 7 8 9 10 11 12 13 14 15 16 17 18	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one expectation of what is out there.	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes.  Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes.  Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No.  Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054 application?
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23 Q. Anything else that you can think of? 23 (Kalokitis Exhibit Number 5)	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one expectation of what is out there.  Q. The proposal would be before the work actually commenced?	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes.  Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes.  Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No.  Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054 application?  A. I don't know what the key differences are or what the intentions were. No,
OA A Tarakahiri afarahirahanan 104 110 11 (10 11 110 11	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one expectation of what is out there.  Q. The proposal would be before the work actually commenced?  A. Correct.	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage?  A. Yes. Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago?  A. No. Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054 application?  A. I don't know what the key differences are or what the intentions were. No, I don't recall.
24 A. I can't think of anything that may 24 marked for identification.)	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	touch. But, there may have been an e-mail or two over the time.  Q. Do you believe any of your conversations would have involved detecting stray voltages or Power Survey's products?  A. I don't know, it has been quite some time since I spoke to him.  Q. Okay. Are you aware of any other documentation of the system that you developed for Con Ed regarding stray voltage that would predate the '054 application?  A. Documentation that would like I said before I expect there is a proposal for the work. And that is probably the, my one expectation of what is out there.  Q. The proposal would be before the work actually commenced?  A. Correct.  Q. Anything else that you can think of?	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	time to flip through it, but, do you recall this patent application?  A. It looks familiar, yes. Q. Is this a patent application related to the work that you were doing for Con Ed regarding stray voltage? A. Yes. Q. And do you recall the thinking behind filing this patent application in addition to the '054 application that we looked at a minute ago? A. No. Q. Do you recall whether this patent application was divulging a further invention in addition to what is disclosed in the '054 application? A. I don't know what the key differences are or what the intentions were. No, I don't recall.  (Kalokitis Exhibit Number 5

	Page 126		Page 128
1	BY MR. GOETTLE:	1	think you referred to as a triaxial?
2	Q. The court reporter has just handed	2	A. I don't know what I referred to it
3	you what has been marked as Kalokitis 5.	3	as.
4	A. Okay. Yes.	4	Q. Okay. And in the claims which is
5	Q. It is a U.S. provisional patent	5	another four or five or so pages back, it is
6	application Serial Number 60/728168.	6	actually Page 44 of 63.
7	A. Yes.	7	A. Yes.
8	Q. This one is titled Stray Voltage	8	Q. And you see Claim 1 there?
9	Detector With Video GUI.	9	A. 44 of 63 of Claim 1, yes.
10	A. Yes.	10	Q. The claim, at least in the beginning
11	Q. And it names you, Mr. Polyzois.	11	recites, "A sensor probe."
12	A. Polyzois.	12	And below that it says that "The
13	Q. And Mr. Schultz as inventors?	13	sensor probe includes a first pair of
14	A. Yes.	14	electrically conductive electrodes."
15	Q. I take it at least one difference	15	Do you see that?
16	between this and the earlier patent applications	16	A. I see that.
17	is adding in a video GUI?	17	Q. And then it recites a second and
18	A. This, this adds a video graphical	18	third pair of electrically conductive electrodes.
19	user interface to our system.	19	Do you see that?
20	Q. And by video can you explain what	20	A. I see that.
21	that means?	21	Q. And that corresponds to the
22	A. A, the typical, well that is a good	22	Figure 1B that we were just looking at towards,
23	question. In today's terminology or then well,	23	on actually it was on Page 54 of 63.
24	the essence of this was that there was a computer	24	MR. DESAI: Was that a question?
	Page 127		Page 129
1	Page 127 interface on a computer screen that was your	1	Page 129 THE WITNESS: So, you are asking if
1 2	•	1 2	<u>-</u>
	interface on a computer screen that was your	1	THE WITNESS: So, you are asking if
2	interface on a computer screen that was your graphical user interface. To the extent that a	2	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B?
2 3	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we	2 3	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At
2 3 4	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.	2 3 4	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the
2 3 4 5	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to	2 3 4 5	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1.
2 3 4 5 6	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?	2 3 4 5 6	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list
2 3 4 5 6 7	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?  A. I think the system goes beyond that.	2 3 4 5 6 7 8	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list of text. And I guess 1B is related to, to
2 3 4 5 6 7 8	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?  A. I think the system goes beyond that. The system let me see. Yes, the system has a	2 3 4 5 6 7 8 9	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list of text. And I guess 1B is related to, to Figure 1, to Claim 1.
2 3 4 5 6 7 8 9 10 11	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?  A. I think the system goes beyond that. The system let me see. Yes, the system has a video camera associated with these displays, I	2 3 4 5 6 7 8 9 10	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list of text. And I guess 1B is related to, to Figure 1, to Claim 1. Q. Because it is a sensor probe that
2 3 4 5 6 7 8 9 10 11	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?  A. I think the system goes beyond that. The system let me see. Yes, the system has a video camera associated with these displays, I see here.	2 3 4 5 6 7 8 9 10 11 12	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list of text. And I guess 1B is related to, to Figure 1, to Claim 1. Q. Because it is a sensor probe that has three pairs of electrically conductive
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	interface on a computer screen that was your graphical user interface. To the extent that a computer screen, I guess, is a video, I guess we called them video display terminals when I started. I guess that is the combination of terms.  Q. So, the video GUI was a reference to the computer display?  A. I think the system goes beyond that. The system let me see. Yes, the system has a video camera associated with these displays, I see here.  So, perhaps video responds, mentions that. Or perhaps it is the display terminal itself. I can't be sure as to what each word traces out to.  Q. Can I get you to turn to Figure 1A, which is only like three or four pages from the back?  A. 1A, yes.  Q. And you see there it has got the sensor probes.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	THE WITNESS: So, you are asking if this Claim 1 references Figure 1B? BY MR. GOETTLE: Q. Or, if the, I guess, yes, I guess that is the way of referring to it, yes. At least Figure 1B is showing one example of the sensor probe recited in Claim 1. A. Well, Claim 1 is a long, long list of text. And I guess 1B is related to, to Figure 1, to Claim 1. Q. Because it is a sensor probe that has three pairs of electrically conductive electrodes? A. That appears to be what it is. Q. Okay. And it also recites an analog to digital converter. A. Yes, it does. Q. And a processor for digitizing. A. Yes. A processor, wait, a processor. A processor coupled to analog digital converter and it says analog to digital converter for digitizing.

	Page 130		Page 132
1	the other two provisionals, Kalokitis 3 and 4 and	1	A. Kalokitis 3 has documentation about
2	I can direct you to the page if you would like.	2	digital signal processing in it.
3	A. Okay.	3	Q. Okay.
4	Q. Which one are you looking at, four?	4	(Kalokitis Exhibit Number 6
5	A. Exhibit 4.	5	marked for identification.)
6	Q. That is on Page 10?	6	BY MR. GOETTLE:
7	A. Page 10 has a similar diagram.	7	Q. The court reporter has just handed
8	Q. And in the other, in the,	8	you what has been marked as Kalokitis 6.
9	Kalokitis 3, it is on the pages are not numbered,	9	A. Yes.
10	it is the third page from the back.	10	Q. That is a U.S. Patent Number
11	A. Yes, I see.	11	7,248,054.
12	Q. Do you see that?	12	A. Yes.
13	A. I see the similar	13	Q. And it is entitled Apparatus and
14	Q. Similar.	14	Method For Detecting an Electric Field.
.15	A. Image.	15	A. I see that.
16	Q. And you recognize that image from	16	Q. Okay. And you are the first named
17	your patents that are in suit, right?	17	inventor on this patent?
18	A. Yes. Well, I don't have them in	18	A. Yes.
19	front of me, so I can't say I recognize them from	19	Q. Right. And, the patent lists five
20	my patents in suit.	20	other inventors, correct?
21	Q. You don't recall?	21	A. Yes.
22	A. Well, I'm not saying I don't recall.	22	Q. And, those five other inventors are
23	I'm saying you are asking me what is on the paper	23	inventors that we saw on the Kalokitis 3 through
24	and I don't have the paper in front of me.	24	5, correct?
		1	
	Page 131		Page 133
1	Page 131 Q. Okay, okay. At least in	1	Page 133  A. 3, 4, 5. So, David Kalokitis
1 2		1 2	-
1	Q. Okay, okay. At least in	į	A. 3, 4, 5. So, David Kalokitis
2	Q. Okay, okay. At least in Kalokitis 4, I think it is in 3 as well, but Kalokitis 4 also talks about signal processing. In fact there is a lot of real estate in here on	2	A. 3, 4, 5. So, David Kalokitis appears on all three. Peter Zalud is in the group, David Berends is in the group, Kristos Polyzois is in the group. Frederick Vannozzi is
2 3	Q. Okay, okay. At least in Kalokitis 4, I think it is in 3 as well, but Kalokitis 4 also talks about signal processing. In fact there is a lot of real estate in here on signal processing, right?	2 3	A. 3, 4, 5. So, David Kalokitis appears on all three. Peter Zalud is in the group, David Berends is in the group, Kristos Polyzois is in the group. Frederick Vannozzi is in the group and Frank Lang is in the group.
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2 3 4 5 6 7 8 9 10	Q. Okay, okay. At least in Kalokitis 4, I think it is in 3 as well, but Kalokitis 4 also talks about signal processing. In fact there is a lot of real estate in here on signal processing, right?  A. In which application?  Q. Kalokitis 4. Which is the '470.  A. Let me see here. Yes, there is, there is documentation here about signal processing.  Q. And same for Kalokitis 3?	2 3 4 5 6 7 8 9 10 11	A. 3, 4, 5. So, David Kalokitis appears on all three. Peter Zalud is in the group, David Berends is in the group, Kristos Polyzois is in the group. Frederick Vannozzi is in the group and Frank Lang is in the group.  Q. And if I did my math right, there is no inventor listed on the three provisional patent applications that aren't listed on the '054 patent, right?  A. Unique appearances of 3, 4, 5, 6, 7, is the grand total 7? 3, 4, 5, 6, 7, I
2 3 4 5 6 7 8 9 10 11 12	Q. Okay, okay. At least in Kalokitis 4, I think it is in 3 as well, but Kalokitis 4 also talks about signal processing. In fact there is a lot of real estate in here on signal processing, right?  A. In which application? Q. Kalokitis 4. Which is the '470. A. Let me see here. Yes, there is, there is documentation here about signal processing. Q. And same for Kalokitis 3? A. No, I don't believe the, that they	2 3 4 5 6 7 8 9 10 11 12	A. 3, 4, 5. So, David Kalokitis appears on all three. Peter Zalud is in the group, David Berends is in the group, Kristos Polyzois is in the group. Frederick Vannozzi is in the group and Frank Lang is in the group.  Q. And if I did my math right, there is no inventor listed on the three provisional patent applications that aren't listed on the '054 patent, right?  A. Unique appearances of 3, 4, 5, 6, 7, is the grand total 7? 3, 4, 5, 6, 7, I believe that is the case.
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	Page 134		Page 136
1	asserting against Narda, right? Or Premier for	1	A. That is correct.
2	that matter?	2	Q. Or Mr. Lang?
3	A. I do not believe the '054 patent is	3	A. That is correct.
4	asserted.	4	Q. So, do you know why those inventors
5	(Kalokitis Exhibit Number 7	5	on the '054 and various provisionals are not
6	marked for identification.)	6	listed on the '864?
7	BY MR. GOETTLE:	7	·A. I do not.
8	Q. The court reporter has handed you	8	Q. Do you know where Mr. Polyzois is
9	what has been marked as Kalokitis 7.	9	now?
10	It is U.S. Patent Number 8,598,864	10	A. I do not.
11	entitled Apparatus and Method For Monitoring and	11	Q. You don't know whether he is
12	Controlling Detection of Stray Voltage Anomalies.	12	employed at Sarnoff?
13	A. Yes, I see that.	13	A. I do not believe he is employed at
14	Q. And this is one of your patents,	14	Sarnoff.
15	right?	15	Q. Did you ever have any understanding
16	A. Yes, it is.	16	of where he may have been employed after Sarnoff?
17	Q. You are the first named inventor	17	A. At one point I knew the name of the
18	again?	18	company, but I cannot think of it now.
19	A. Yes.	19	Q. Have you spoken or seen Mr. Polyzois
20	Q. And this is one of the patents that	20	since you have left Sarnoff?
21	is being asserted against Narda and Premier,	21	A. I haven't seen him since I left
22	right?	22	Sarnoff.
23	A. Yes.	23	Q. How about Mr. Schultz? Do you know
24	Q. Okay. And how does the inventorship	24	if Mr. Schultz is still at Sarnoff?
	Page 135		Page 137
1	on this patent compare with the '054 patent?	1	A. I don't believe Mr. Schultz is at
2			
	A. There is less names on the '864	2	Sarnoff.
3		2	Sarnoff.
	patent than the '054.		Sarnoff.
3		3	Sarnoff.  Q. Do you happen to know where he went
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3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	patent than the '054.  Q. Actually, I just realized on the '054 there is one inventor missing that is on the provisional, and maybe you said this, and that was Mr. Schultz.  A. Okay. Q. Correct? A. I don't recall what I said. Q. Oh, actually, ignoring whatever you said because I don't remember, either. But, Mr. Schultz is listed on one of the provisional patent applications, Kalokitis 5, and he is not listed on the '054.  A. That is correct. Q. But he is listed on the '864 which is Kalokitis 7. Right? A. Yes, he is. Q. And, but Mr. Zalud is not listed on	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Sarnoff. Q. Do you happen to know where he went since he has left Sarnoff? A. I have not seen Mr. Schultz since he left Sarnoff. Q. Have you seen Mr. Schultz since you left Sarnoff? A. No, I have not. Q. Now, who is Mr. Paragano? A. Mr. Paragano is a software, software type. Software type guy. Q. Was he at Sarnoff with you? A. Yes, he was. Q. Is he still at Sarnoff? A. I don't believe he is still at Sarnoff. Q. Do you know where he went after Sarnoff? A. I do not know. Q. Have you seen or spoken to Mr. Paragano since, or Paragano since?
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	patent than the '054.  Q. Actually, I just realized on the '054 there is one inventor missing that is on the provisional, and maybe you said this, and that was Mr. Schultz.  A. Okay. Q. Correct? A. I don't recall what I said. Q. Oh, actually, ignoring whatever you said because I don't remember, either. But, Mr. Schultz is listed on one of the provisional patent applications, Kalokitis 5, and he is not listed on the '054.  A. That is correct. Q. But he is listed on the '864 which is Kalokitis 7. Right?  A. Yes, he is. Q. And, but Mr. Zalud is not listed on the '864 patent, right?	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Sarnoff. Q. Do you happen to know where he went since he has left Sarnoff? A. I have not seen Mr. Schultz since he left Sarnoff. Q. Have you seen Mr. Schultz since you left Sarnoff? A. No, I have not. Q. Now, who is Mr. Paragano? A. Mr. Paragano is a software, software type. Software type guy. Q. Was he at Sarnoff with you? A. Yes, he was. Q. Is he still at Sarnoff? A. I don't believe he is still at Sarnoff. Q. Do you know where he went after Sarnoff? A. I do not know. Q. Have you seen or spoken to

	Page 138		Page 140
1	A. I have seen him.	1	inventors are we speaking about, anybody on the
2	Q. What were the circumstances of that?	2	table here?
3	A. We, um, we spoke about some other	3	Q. If it is easier, I will just run
4	work that we might consider, we might consider	4	through the names.
5	proposing together.	5	A. No, I think I understand your
6	Q. Can I, is the nature of that work	6	question. If I can put it in my own terms, then
7	confidential?	7	I know I understand it.
8	A. It is.	8	So you are asking if the people on
9	Q. How long ago was that?	9	these applications were involved in the work that
10	A. Within the last 12 months.	10	predated Jody Lane?
11	Q. Can you disclose whether that work	11	Q. For stray voltage, yes.
12	involved stray voltage?	12	A. For stray voltage. Yes.
13	A. It did not.	13	Q. Who?
14	Q. And would your participation in that	14	A. Frank Lang and Fred Vannozzi.
15	work be as a employee of Power Survey, or is this	15	Q. Would that be at least one reason
16	something on your own?	16	that they would have been on your team, because
17	A. The work would be a Power Survey; it	17	they already had that background when Con Ed
18	would be a Power Survey effort.	18	approached Sarnoff in 2004?
19	Q. How many times have you spoken to	19	A. I think there are some assumptions
20	Mr. Paragano about this?	20	in there. The, my team, when I led the
21	A. Once.	21	development work I did, had people come in the
22	Q. Is that effort still ongoing?	22	and out of the matrix and I don't remember
23	A. Not really.	23	specifically in the early days who came in and
2 4	Q. Would Mr. Paragano, we have a	24	out, you know, as we got started.
	Page 139		Page 141
1	Page 139	1	Page 141 The team reached about 70 members at
1	partner at my firm called Paravano and that is	1 2	The team reached about 70 members at
2	partner at my firm called Paravano and that is why I keep messing this up.	2	The team reached about 70 members at conclusion.
2 3	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay.	2 3	The team reached about 70 members at conclusion. Q. 70?
2 3 4	partner at my firm called Paravano and that is why I keep messing this up. A. Okay. Q. Could it be that Mr. Paragano is	2 3 4	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you
2 3 4 5	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay.  Q. Could it be that Mr. Paragano is working on the effort?	2 3 4 5	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you know, everybody who, you know, turned a, you
2 3 4	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay. Q. Could it be that Mr. Paragano is working on the effort? A. I don't know what Mr. Paragano is	2 3 4	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you know, everybody who, you know, turned a, you know, turned in a time card, let's put it, from
2 3 4 5 6	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay. Q. Could it be that Mr. Paragano is working on the effort?  A. I don't know what Mr. Paragano is working on.	2 3 4 5 6	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you know, everybody who, you know, turned a, you know, turned in a time card, let's put it, from accounting through purchasing, through what have
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay. Q. Could it be that Mr. Paragano is working on the effort? A. I don't know what Mr. Paragano is working on. Q. Does anybody else at Power Survey was anybody else at Power Survey ever aware of this conversation you had with Mr. Paragano? A. Yes. Q. Who would that be? A. Tom Catanese. Q. Okay. Would Mr. Catanese be as aware of the effort as you? A. I believe so. There is not an effort, right, it was a potential effort. So Q. I understand. Okay. Do you happen to know or have an understanding about whether any of the inventors on the various patent applications that we have talked about today were involved in that initial	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you know, everybody who, you know, turned a, you know, turned in a time card, let's put it, from accounting through purchasing, through what have you, probably would hit that kind of number.  Q. And Mr. Vannozzi and Mr. Lang were involved in the early part?  A. Prior to Jody Lane. They were involved prior to Jody Lane.  Q. And they were also involved early on in the initial stages of the work for Con Ed after Jody Lane?  A. I don't remember their exact involvement or what their roles were at that point in time.  (Kalokitis Exhibit Number 8 marked for identification.)  BY MR. GOETTLE:  Q. The court reporter has just handed
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	partner at my firm called Paravano and that is why I keep messing this up.  A. Okay. Q. Could it be that Mr. Paragano is working on the effort? A. I don't know what Mr. Paragano is working on. Q. Does anybody else at Power Survey was anybody else at Power Survey ever aware of this conversation you had with Mr. Paragano? A. Yes. Q. Who would that be? A. Tom Catanese. Q. Okay. Would Mr. Catanese be as aware of the effort as you? A. I believe so. There is not an effort, right, it was a potential effort. So Q. I understand. Okay. Do you happen to know or have an understanding about whether any of the inventors on the various patent applications that we have	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	The team reached about 70 members at conclusion.  Q. 70?  A. If you counted everybody who, you know, everybody who, you know, turned a, you know, turned in a time card, let's put it, from accounting through purchasing, through what have you, probably would hit that kind of number.  Q. And Mr. Vannozzi and Mr. Lang were involved in the early part?  A. Prior to Jody Lane. They were involved prior to Jody Lane.  Q. And they were also involved early on in the initial stages of the work for Con Ed after Jody Lane?  A. I don't remember their exact involvement or what their roles were at that point in time.  (Kalokitis Exhibit Number 8 marked for identification.)  BY MR. GOETTLE:

#### Page 142 Page 144 1 O. It is U.S. Patent Number 8,577,631 1 BY MR. GOETTLE: 2 and it is titled Method and Apparatus For 2 Q. But by reference to a false positive 3 Discrimination of Sources in Stray Voltage 3 in that sentence that you started to read --4 Detection. 4 A. Yes. 5 A. Yes. 5 Q. That means like a false positive 6. 6 Q. And this names you as the sole that the electric field is being caused by, the 7 7 inventor. electric field is associated with an object that 8 8 A. Yes. is energized that you normally would not think is 9 energized, versus one that you would think would 9 Q. And you recognize this patent? 10 A. I do. 10 be energized. How is that for an unclear --Q. Okay. Now, could you describe to me 11 A. Well, false positive again, 11 in general terms what the invention is in this 12 depending upon its usage and time and place, 12 patent? 13 13 means different things. 14 A. Okay. So, when you are driving by 14 Q. I just want to know what it means 15 sources of electric field, it would be helpful to 15 here. differentiate those sources if you have any 16 16 A. No, I understand your question. 17 techniques to do that. 17 So, if you, if you look at the 18 So this technique is able to look at 18 diagram here of what we are, you know, what we 19 a source of electric field, and look at the are showing we have accomplished is that an 19 20 20 example of a Don't Walk sign which emits electric frequency components of that source of electric 21 field. And allow one to, and the system will, 21 field at both the 60 hertz frequency, the 22 22 you know, graphically show you those components 120 hertz frequency, the 180 hertz frequency and 23 such that you can potentially determine the 23 for all I know it may have made it at other 24 24 source, you know, what is the, what is the object frequencies, too; if you are able to, if you are Page 143 Page 145 that is giving you these electric fields. 1 able to judge that the primary or the greatest or 1 2 Q. And on that Column 1, around 2 that there is significant amounts of 120 Hertz 3 energy coming from a streetlight and you look out 3 Line 44? 4 the window of your detection system and you see 4 A. Column 1, okay. The lines aren't 5 5 there is a streetlight, right, there is a numbered so. 6 6 reasonable conclusion that the thing that is Q. Do you see, running down the middle 7 7 causing the signal to display on your machine is is --8 A. Oh, I'm sorry, I'm sorry. 8 the Don't Walk sign. 9 Q. That is okay. There is a paragraph Q. Because that, if it is displayed on 9 10 that starts "During"? 10 your screen, that could be what you referred to A. "During the remote detection of 11 as a false positive for a stray voltage when, in 11 stray voltages a false positive may occur when an 12 fact, it is not a stray voltage. 12 13 13 object emits an electric field." A. A false positive in the paradigm of 14 Yes, I see the sentence. 14 stray voltage testing in the street is a 15 Q. Okay. And, so, so the invention is 15 signal -- a false positive is when you see 16 trying to discern between an object that should something, when you see a signal coming from an 16 17 17 have an electric field, you would expect to have object and you interpret it as a potential stray 18 an electric field, versus one that does not? 18 voltage hazard and after final review you learn 19 that it is not a stray voltage hazard. 19 MR. DESAI: Objection, 20 20 mischaracterizes the testimony. Q. Well let's take this example that 21 THE WITNESS: The invention is to be 21 you have in Figure 1. I think this is what you 22 able to use the signal components to gain an 22 were referring to. 23 23 understanding of what may be the source of THE WITNESS: Figure 1. 24 BY MR. GOETTLE: 24 those signals.

#### Page 148 Page 146 Q. And I don't know how long it has 1 over the manhole cover, that is no longer part of 1 2 2 been since you have seen this patent, so I can the thought process. 3 3 direct to you the description in the patent Q. Exactly. 4 for it. A. And so now you are saying I am 4 5 driving by the streetlight, I'm sorry, the Don't 5 A. Okay. 6 6 Q. But am I right that what the figure Walk sign, and I get a signature that my 7 is getting across is when you are inside 104, the 7 experience, or the system, the system is 8 truck. 8 processing, the system's processing can show us, 9 9 A. Yes. is greater in the 120 hertz realm, which is our 10 Q. And your system has detected an 10 expectation of a Don't Walk sign that uses 11 electric field. 11 whatever type of lighting that, you know, that 12 A. Yes. 12 produces that, that you can then discern that 13 Q. It, the goal is that you would be 13 using that technique. 14 able to tell without getting out of the truck 14 Q. And, if the manhole cover is there 15 that what has been electrified is the manhole 15 and not energized under the circumstance you have 16 cover or what has been, what has electric field 16 just said, the person that, in the truck would 17 is the crosswalk. Right? 17 have a good indication that even though I see a 18 A. The Don't Walk sign and the manhole 18 manhole cover there, odds are this signal that 19 cover are the two potential targets in the 19 I'm seeing on my computer is being generated from 20 diagram. 20 the crosswalk sign. That would be the goal. Q. Okay. 21 21 A. I don't know that the operator is 22 A. And by looking at the, the 22 cognizant of the manhole cover at all in that 23 individual components of the signal, you, you 23 paradigm. 24 will get a better sense as to what it is that is 24 Q. Well, isn't somebody in the truck Page 147 Page 149 1 1 providing the electric field. trying to figure out where stray voltages are? 2 2 So in the case of the manhole cover, A. The operator in the truck is looking 3 3 which is purely energized by a stray or contact for energized structures. Q. Well? 4 voltage, you would see one signature. And when 4 5 5 you drive by the streetlight, I'm sorry, the A. So the manhole cover does not 6 6 Don't Walk sign, you would see another signature provide any signature to the system at all. 7 7 and you could potentially discriminate using that So, therefore, the operator is not 8 information. 8 cognizant of the manhole cover. 9 9 Q. I see. And so that way, if you are, Q. Not from the system. From the 10 let's take Figure 1, but change it a little bit 10 system -and say the manhole cover is not energized, okay? 11 11 A. Oh, if he uses his eyeballs and he 12 A. If the manhole cover is not 12 can see a manhole cover. 13 13 energized, okay. Q. That is what I'm saying? 14 Q. And your system in your truck shows 14 A. Then the operator can use his 15 you there is an electric field, indicative of a 15 eyeballs to see the manhole cover. 16 16 voltage somewhere. Using the system that you Q. That is what I am saying, the alarm 17 have disclosed in the patent you may be able to 17 goes off indicating there is an electric field, 18 discern that that electric field would logically 18 okay? 19 19 correspond to the crosswalk sign. A. Yes. 20 A. So I'm not sure I follow your exact 20 Q. And he sees the manhole cover and 21 logic, because you mentioned a manhole cover that 21 maybe his first thought is boy, I wonder if it is 22 has no voltage on it. 22 that manhole cover that is generating this 23 23 Q. Uh-huh. electric field, right? A. So you have to kind of put your hand 24 24 A. Yes.

#### Page 152 Page 150 Q. But from your invention he can look 1 mischaracterizes the document, 1 2 mischaracterizes the testimony. 2 at his computer screen, he can say you know this 3 THE WITNESS: So, I will restate it. 3 signal looks more indicative of that crosswalk signal there. 4 This, the purpose of this invention is that 4 5 when you drive by a streetlight which has the 5 MR. DESAI: Objection, lacks 6 6 foundation, form. opportunity to be energized with stray or 7 7 contact voltage and that same streetlight has Go ahead. 8 THE WITNESS: The operator sees the 8 a Don't Walk sign mounted to it and I get a display, and at the same time he sees the 9 signal in my system, I can look at the signal 9 10 and I can say that that street lighting 10 Don't Walk sign with his eyeballs and he can associate the two and say that I have signal 11 standard that I am driving by is likely 11 12 giving me a signal from the Don't Walk sign 12 here, but I have enough detail now to tell me that it is probably coming from the Don't 13 and not from stray voltage being on that 13 14 pole. 14 Walk sign. 15 BY MR. GOETTLE: 15 BY MR. GOETTLE: O. And not from the manhole cover that 16 Q. So, it is giving you, the system in 16 17 17 I also see? this patent is giving you an indication of 18 whether the electric field is associated with an 18 A. I think it is a stretch to pull the 19 anomaly or is associated with the crosswalk sign? 19 manhole cover into that. 20 O. Really? 20 A. The system allows me to distinguish, 21 potentially distinguish the source of electric 21 A. I do. 22 field as to being a stray or contact voltage or a 22 Q. Isn't that the point of this 23 invention is to distinguish between the two 23 signature I recognize as something else. Like the Don't Walk sign. different electric fields? Isn't that why you 24 24 Page 151 Page 153 1 There is potential for more than one 1 have that in the figure? signature to come out of this work. A Don't Walk 2 2 MR. DESAI: Objection, mischaracterizes the testimony, 3 sign has a signal, a signature. Another object 3 4 might have another signature. And to the extent 4 mischaracterizes the document. 5 that you can understand more than one signature, 5 THE WITNESS: I think the 6 you can impart more decision making. 6 description here talks about two different 7 7 Q. Could you turn to Column 3? cases. I think the case, I know the case 8 8 A. Yes. that I am most trying to discriminate is that 9 Q. At Line 22 there is a paragraph that 9 I have, as you see, this, this Don't Walk 10 starts, "The SVD system." 10 sign mounted on a pole, okay. And the question I'm asking is, is 11 A. Yes. 11 12 O. Is this SVD system that is described 12 that pole energized? Or is it the Don't Walk 13 here, is this a Power Survey system? 13 sign that is on the pole giving me a signal? 14 A. It says the SVD System 102. So, it 14 I don't care about the manhole 15 is whatever is pictured in 102. It is the stray 15 cover. 16 voltage detection system. 16 BY MR. GOETTLE: 17 Q. Okay. But, Power Survey calls its 17 Q. Okay. So, in your invention, in 18 this patent, the '631 patent, the operator in 18 system that it sells SVD, right? You have the SVD 1000 and the SVD 2000, don't you? At Power 19 that truck from the display in the system will be 19 20 Survey? 20 able to discern that, oh, this electric field is 21 21 A. We have the SVD 2000. We use the being caused by the crosswalk sign and not by the 22 SVD 2000 currently at Power Survey. 22 pole, right? 23 Q. Okay. So I'm just asking you, it is 23 A. That's the -the same letters, SVD in the patent. I'm just 24 MR. DESAI: Objection, 24

#### Page 156 Page 154 asking, is this, is this paragraph referring to 1 1 this moment being used in a Power Survey 2 Power Survey's product? 2 system. 3 A. Are you asking --BY MR. GOETTLE: 3 MR. DESAI: Objection, asked and 4 4 Q. Are you testing the implementation 5 5 of this invention in a Power Survey system answered. 6 potentially for future use? 6 Go ahead. 7 7 BY MR. GOETTLE: A. At this moment, I am not testing 8 Q. Or is it just coincidence that we 8 that technology. use the same three letters to denote the system 9 9 Q. Have you tested it? 10 in the patent as Power Survey does for its 10 A. I have tested the technology. 11 11 Q. And what were the results of the 12 A. The implementation of this may or 12 testing? may not be on Power Survey's product. 13 13 A. The test results are captured in 14 Q. You don't know? 14 this, in this patent, actually. There is 15 A. It can or cannot be on Power 15 photographs from the tests on Figure 5. 16 Survey's product. 16 Q. Do you anticipate, do you or Power 17 Survey anticipate using the invention in the '631 17 Q. Oh. You have the technology; it is just sometimes you use it sometimes you don't? 18 18 patent in the future? 19 MR. DESAI: Objection, 19 A. It is hard to say at this point. It 20 20 is, it really depends upon, you know, many mischaracterizes testimony. 21 THE WITNESS: I have an SVD 2000 21 factors in the marketplace. 22 system. I have technology captured in this 22 You have air conditioning in your 23 patent that I can potentially use or not use 23 car. Do you intend on using it today? It is a 24 in the SVD 2000 as I need or don't need it. 24 capability, okay. It is a feature. It is a Page 157 Page 155 1 BY MR. GOETTLE: 1 potential feature. So, in some applications you 2 Q. Okay. So some, some Power Survey 2 may want it, and some applications you may not 3 systems that are in trucks today getting driven want it. 3 around streets, some of them are using the 4 Q. Have you shown the implementation of 4 5 invention you have disclosed in the '631 patent? 5 your invention in a Power Survey product to any A. I didn't say that. 6 customers or potential customers? 6 7 7 Q. I don't know what, I don't know what A. I don't recall demonstrating that 8 it is about my question that is making this so 8 capability to a customer or a potential customer. 9 9 MR. DESAI: Time for a break? hard. 10 Is this invention, is the invention 10 THE WITNESS: I could use five 11 in this patent to discriminate sources of stray 11 minutes. voltage being implemented by Power Survey? 12 MR. GOETTLE: Sure. 12 13 THE VIDEOGRAPHER: The time now is A. In what context do you mean 13 14 implemented? 14 2:06. We are going off the record. This is 15 Q. In any context. 15 the end of Disk Number 2. (Recess taken -- 2:06 p.m.) 16 A. I don't, I don't have a contract at 16 (After recess -- 2:14 p.m.) 17 this moment with a customer that requires the use 17 18 of this, of this. 18 THE VIDEOGRAPHER: The time now is 19 Q. Is it being used in any Power Survey 19 2:14, we are back on the record. This is the system? 20 beginning of Disk Number 3. 20 BY MR. GOETTLE: 21 A. Is it being used in any Power Survey 21 22 22 Q. I think I forgot to ask you if you system? knew where Mr. Zalud is nowadays? 23 MR. DESAI: Objection, vague. 23 A. I believe he is at Sarnoff, but I 24 THE WITNESS: It is not actively at 24

	Page 158		Page 160
1 d	lon't know for sure.	1	A. I don't know.
2	Q. Have you talked to Mr. Zalud since	2	Q. It feels like we already talked
3 y	ou have left Sarnoff?	3	about Mr. Paragano.
4	A. I haven't seen Peter in years.	4	A. Yes.
5	Q. Okay. Now I'm referring to the '864	5	Q. Software type.
6 p	patent which is one of the three that are	6	A. Yes.
7 a	sserted in the litigation.	7	Q. Do you know if Mr. Paragano is still
8	A. Yes.	8	at Sarnoff?
9	Q. I believe you already told me what	9	A. I don't believe he is.
10 N	Mr. Schultz's contribution was. But, maybe not.	10	Q. Do you know where he is?
11 I'	'm not sure actually.	11	A. I don't know where he is working.
12	Would you mind telling me what was	12	Q. Do you know where he lives?
13 N	Mr. Schultz's contribution to the invention?	13	A. I think it says on one of these
14	A. I don't know, you know, the	14	documents. I don't know if it is his current
	pecifics of contributions. Mr. Schultz was a,	15	address.
i .	s a long time engineer and was part of our team	16	Q. I see. Aside from what might be
E .	and we, and, you know, this was a group effort.	17	written on the document?
18 S	So, his, he is a systems level guy.	18	A. Aside from that, I have no
19	So he had a lot of systems	19	independent knowledge of where he is.
	experience and participated in a lot of the	20	Q. And actually keeping on the subject
21 d	liscussions and spent a lot of time on the	21	of the '864 patent, which is one of the patents
	project.	22	asserted in the litigation, does, how does this
23	Q. And do you know where Mr. Schultz	23	patent disclose discerning a stray voltage from
24 is	s?	24	an electric field one would expect to be there?
	Page 159		Page 161
1	A. I don't.	1	In other words, we just talked about
2	Q. Have you talked to him since you	2	the crosswalk and how you would expect the
	eft?	3	crosswalk to have an electric field, versus the
4	A. I haven't seen Len Schultz since I	4	manhole cover which you wouldn't. How does this
	eft Sarnoff.	5	patent discern between those two?
6	Q. Okay. And what was, if the you can	6	A. Let me try and understand that. How
i	ecall, what was Mr. Polyzois' contribution?	7	does this patent discern between, without reading
8	A. Mr. Polyzois was a smart guy with a	8	this in detail, I don't even know which of the
l	ot of education.	9	patents in the group, you know, what this patent
10	But his, he was very active in	10	produces. That is a complicated question for me.
11 de	efining a lot of the features, you know, that	11	Q. You have compared the claims of this
		10	· · · · · · · · · · · · · · · · · · ·
12 oi	ne would need out there that appeared in some of	12	patent to Narda's system, right?
12 or	nese display figures.	13	patent to Narda's system, right?  MR. DESAI: Objection, lacks
12 oi 13 th 14	nese display figures. You know, helping productize the	13 14	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.
12 or 13 th 14 15 do	nese display figures. You know, helping productize the esign into something that would be attractive.	13 14 15	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims
12 or 13 th 14 15 de 16	rese display figures. You know, helping productize the esign into something that would be attractive. Q. User friendly, that kind of thing?	13 14 15 16	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact
12 01 13 th 14 15 do 16	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.	13 14 15 16 17	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's
12 01 13 th 14 15 de 16 17 18	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois	13 14 15 16 17 18	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.
12 or 13 th 14 15 do 17 18 19 si	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois ince you have left?	13 14 15 16 17 18	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.  BY MR. GOETTLE:
12 or 13 th 14 15 do 16 17 18 19 si 20	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois ince you have left?  A. I haven't seen him since before I	13 14 15 16 17 18 19 20	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.  BY MR. GOETTLE:  Q. So, you don't have a belief one way
12 or 13 th 14 15 do 16 17 18 19 si 20 21 le	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois ince you have left?  A. I haven't seen him since before I eft.	13 14 15 16 17 18 19 20 21	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.  BY MR. GOETTLE:  Q. So, you don't have a belief one way or the other whether Narda is infringing your
12 or 13 th 14 15 do 16 17 18 19 si 20 21 le 22	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois ince you have left?  A. I haven't seen him since before I eft.  Q. Did he leave Sarnoff before you?	13 14 15 16 17 18 19 20 21 22	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.  BY MR. GOETTLE:  Q. So, you don't have a belief one way or the other whether Narda is infringing your patent?
12 or 13 th 14 15 do 16 17 18 19 si 20 21 le	You know, helping productize the esign into something that would be attractive.  Q. User friendly, that kind of thing?  A. That kind of thing, yes.  Q. And have you talked to Mr. Polyzois ince you have left?  A. I haven't seen him since before I eft.	13 14 15 16 17 18 19 20 21	patent to Narda's system, right?  MR. DESAI: Objection, lacks foundation.  THE WITNESS: I'm not a claims expert in understanding, you know, the exact application of these claims to Narda's system.  BY MR. GOETTLE:  Q. So, you don't have a belief one way or the other whether Narda is infringing your

#### Page 162 Page 164 Depending upon your definition of 1 or more patents that I have. I don't know that, 1 A. 2 2 I don't have all of the patents in front of me, signal. 3 3 Q. So, it might not? Q. Well, if it helps you I can pull 4 A. No. No. I'm not saying that. I'm 4 5 5 them out. saying it generates a response or a signal, a A. Well, I'm, I will say that since the 6 signal to an operator or a, you know, some 6 7 '864 is named in the suit, I believe that the 7 representation, some associated indicator or 8 8 '864 is infringed by the 8950 system. representation corresponding to an electric 9 Q. And how did you form that belief? 9 field. MR. DESAI: And Mr. Kalokitis, to 10 Q. Okay. And the 8950/10 does that? 10 11 the extent that answering requires you to 11 A. I believe the 8950/10 gives a 12 12 disclose communications with your attorneys representation of an electric field. you should not do that. To the extent you 13 13 Q. And did you just testify that you find this claim kind of long and confusing? 14 can answer without doing that, go ahead. 14 15 THE WITNESS: Okay. My, I have some 15 A. No, not confusing. I said you 16 observations of some of the equipment and 16 quoted a few words out of a very long paragraph. 17 some of the claims around the equipment. 17 O. I see. Okay. And feel free to read 18 BY MR. GOETTLE: 18 the whole thing. But somewhere in the claim, 19 Q. So, did you look at the claims of 19 right around Line 60, requires identifying a 20 the, like Claim 1, for example, of the '864 20 voltage anomaly in the electric field. 21 patent and compare it to Narda's system? 21 I see around Line 60 it says, 22 A. To which system are you referring? 22 "Clarity of time domain samples produced as field 23 The 8950? 23 strengths of each of the at least one sensor 24 24 Q. The 89 -- well let's start with the probes using the plurality of time domain samples Page 163 Page 165 8950/10. 1 and analyzes the field strengths to identify a 1 2 A. Yes, I have looked at Claim 1 and 2 voltage anomaly in the electric field." 3 tried to interpret it in the realm of the 3 Q. And it is your belief that the 4 8950/10. 4 8950/10 does that? 5 5 Q. Okay. And, Claim I requires A. Yes. 6 generating a signal that corresponds to an 6 Q. Okay. So what I want to know is 7 7 electric field, right? where in the patent does it describe identifying 8 a voltage anomaly in the electric field. 8 MR. DESAI: Objection, 9 9 mischaracterizes the document. A. There is a lot here for me to read. 10 THE WITNESS: Claim 1 is a long and 10 Let's see. So, let me understand what you are complicated claim and there is a sentence in 11 asking. You are asking where in what, in the 11 12 there that talks about generating an electric 12 figures, or where in the text? I'm not sure I 13 field. That much I can read. 13 know how to answer your question. 14 BY MR. GOETTLE: 14 Q. Anywhere in the patent. I just want 1.5 Q. Okay. Well, actually it requires 15 to know where in the patent, anywhere, it 16 generating a signal corresponding to an electric 16 describes that step. 17 17 field, right? At line --A. I see it in the summary, on Line 38, 18 39. 18 A. Yes, I read the words it says, 19 "Generates a signal corresponding to an electric 19 Q. Line 38 and 39 of the summary in 20 field." 20 Column 2? 21 A. Let me go back to that. Column 2, 21 Q. And it is your belief that Narda's system does that, the 8950/10, right? 22 yes. It is probably elsewhere in here. 22 23 A. Uh-huh. 23 Q. Because it is referring to the 24 24 Q. And then feel free to read -statement that says, "Analyzing the collected

#### Page 166 Page 168 '864 patent. So I'm relying on the specification 1 data to identify a voltage anomaly in the 1 2 electric field." 2 within the '864 patent. 3 3 Is that what you were referring to? Q. Right. Implementing the claimed A. Yes. At Line 38 and 39 in the invention in the '864 patent. 4 4 5 summary. 5 A. Okay. 6 6 Q. Okay. And in your mind that is Q. And the only electric field near the 7 7 truck is the field created from the blinking explaining how you do it? 8 8 crosswalk sign. Okay? Are you with me? A. No. 9 Q. Oh, okay. 9 A. The only electric field in the 10 A. That is where it is mentioned. On 10 vicinity is the signal coming from the blinking 11 Do Not Walk sign. 11 Column 12 around Line 30, there is some references to the, "It provides the interface 12 Q. Yes. 12 13 operator with an opportunity to visually monitor 13 A. Yes. and analyze incoming data." Q. Okay. Will this system be able to 14 14 15 Q. I apologize, Column 12 what line? 15 discern that that electric field is not created 16 A. 30. 16 from stray voltage? Q. Okay. So, it is the person that 17 A. Would this system be able to discern 17 would be identifying the voltage anomaly in the 18 that that electric field is not --18 19 electric field and not the, not the claimed 19 Would the system be able to discern 20 that the electric field is not created from stray 20 apparatus? 21 21 voltage. Is not -- I'm trying to think of what A. Oh, no. The system provides alarm 22 information, the system provides graphical 22 the depth of that is. Will not discern, I mean, 23 information, it provides a number of indications 23 the '631 patent describes discrimination of 24 that there is an anomaly, that there is an 24 sources. Page 169 Page 167 1 So, so, certainly in that case there 1 electric field anomaly. 2 is an attempt in there to discern between the Do 2 Q. So, in the example that we were 3 3 talking about earlier, with respect to your '631 Not Walk sign and the streetlight. 4 4 patent, with the blinking crosswalk sign, will To the system described in the '864 5 5 patent, the Don't Walk sign and what an energized the system disclosed in this '864 patent be able 6 streetlight, can it tell the difference between 6 to discern that that is not, that the electric 7 7 field associated with that crosswalk sign is not those two? Is that the question? 8 a voltage anomaly? 8 Q. You really don't understand my 9 9 MR. DESAI: Objection, lacks question? 10 10 foundation. A. I'm not sure I do. I mean, if that, 11 11 THE WITNESS: I'm, I'm, I don't I understand that question but I'm not sure I 12 12 quite understand the question. Are you understand your question. 13 MR. DESAI: And for the record I 13 asking -- say it again. BY MR. GOETTLE: 14 don't understand the question, either. 14 15 Q. Let me start over. 15 MR. GOETTLE: I don't even 16 understand why you are saying that. You want 16 A. Okay. 17 to object for form, you go ahead and object 17 Q. I will set it up a little better. 18 Let's take the scenario from your 18 for form. 19 MR. DESAI: I will. '631 patent where you are in the truck, but 19 20 BY MR. GOETTLE: 20 instead of using that system, we are using the system disclosed and described in the '864 21 21 Q. You know what, let's step back. 22 Does Power Survey's system implement 22 patent, okay? 23 the invention of the '864 patent? 23 A. Instead of the source discrimination 24 24 system, I am using the system described in the A. Yes.

#### Page 172 Page 170 1 Q. Okay. When you are in the truck 1 are not created by stray voltage. with Power Survey's equipment --2 MR. DESAI: Same objections. 2 A. Yes. 3 THE WITNESS: The system provides an 3 Q. -- and you drive under a streetlight 4 4 alarm and indication when high electric field that is on, or you drive by a blinking crosswalk 5 5 or anomalies in electric field are sensed and sign, will the indicator associated with the 6 6 stray voltage is a source of that anomalous 7 system indicate that there is an electric field? 7 electric field, and there are other sources 8 A. Yes. It will indicate that there is 8 that can potentially give an indication. 9 an electric field. 9 BY MR. GOETTLE: 10 Q. And will the driver of that system 10 Q. An indication of what? 11 or the user of that system be able to tell that A. That can cause the system to 11 12 that electric field is not the result of stray 12 indicate, to alarm. 13 voltage? 13 Q. So, you are driving down the street 14 A. Be able to tell that it is not the using the system that is claimed in the '864 14 15 result of stray voltage. 15 patent. 16 MR. DESAI: Objection, form. 16 A. Uh-huh. THE WITNESS: Something seems off 17 17 Q. And the alarm goes off. And the 18 about that conclusion. 18 user of that system doesn't know, without taking 19 So, if the there is stray or contact 19 in more information, whether the alarm is going 20 voltage on a structure, the system will 20 off because there is a stray voltage or a 21 respond with a, with a, an indication and 21 crosswalk sign that is blinking? will alert the user to the presence of that 22 22 A. There are conditions where that can 23 electric field. 23 happen. 24 If there is a Do Not Walk sign that Q. And so there are other times when 24 Page 171 Page 173 1 the operator of the system, without looking 1 is illuminated and it is emitting like electric field, then the system will indicate 2 around or taking in any other information, will 2 know that the alarm is going off because it is 3 that electric field. 3 4 caused by a stray voltage? 4 So, There are instances when that Do Not Walk sign will be interpreted by the 5 A. The conditions where the operator is 5 system as a similar, as a similar signal as 6 driving by something and he gets an alarm, and 6 7 the stray or contact voltage anomaly might 7 the alarm is not due to a stray or contact 8 provide. 8 voltage, and then what was the next piece? I am 9 trying to put it all together. 9 BY MR. GOETTLE: 10 Q. So, the system that implements the 10 The system indicates anomalous invention of the '864 patent cannot discern electric field that is usually associated with 11 11 between a field that's associated with stray 12 12 stray voltage or contact voltage. 13 voltage versus a field that's not associated with 13 Q. But doesn't it also indicate 14 stray voltage. 14 electric fields caused by the traffic light the 15 MR. DESAI: Objection, lacks 15 truck is going underneath, or the crosswalk sign 16 that is blinking or the streetlight? 16 foundation, form. THE WITNESS: Ask it again. I'm 17 17 A. It, not necessarily streetlights. 18 18 Q. But the traffic light? sorry. 19 A. If the traffic light exhibits a 19 BY MR. GOETTLE: 20 Q. The system that implements the '864 20 similar signature, then the operator does not get 21 invention ---21 a clear representation as to which of those 22 22 things is providing it. A. Yes. Q. Cannot discern between electric 23 23 Q. Because the system doesn't know, it fields created by stray voltage versus those that 24 doesn't know what the electric field, what is 24

#### Page 176 Page 174 causing the electric field? It just knows that 1 1 stray voltage? 2 there is an electric field, right? 2 MR. DESAI: Objection, 3 3 A. It, the system provides an mischaracterizes the testimony. 4 indication that there is an electric field. And 4 THE WITNESS: My invention can 5 in the, in the arenas of where the system has 5 detect anomalous fields that come from 6 operated, much of those anomalies, much of those 6 energized stray or contact voltage energized 7 7 anomalous electric fields are associated with structures. 8 8 stray and contact voltage. BY MR. GOETTLE: 9 9 Q. That is because the person using the Q. Absolutely it can. But it can't 10 system or somebody else has to figure that out, 10 discern when it is caused by an anomalous voltage 11 right? You can't, he doesn't figure out whether 11 versus when it is caused by a voltage that you 12 would expect to be there. It will detect 12 it is an anomalous voltage creating the electric 13 13 field? He has got to look around and say, oh, anomalous voltage because it is creating an 14 the alarm is going off, I wonder what is creating 14 electric field, right? 15 that. Is there anything around that that makes 15 A. The anomalous voltage creates an 16 16 sense to be creating that, right? electric field, yes. 17 MR. DESAI: Objection. 17 Q. But it will also detect the electric 18 BY MR. GOETTLE: 18 fields created by things that should create 19 Q. You can't just look at the screen on electric fields, like blinking crosswalk signs, 19 20 20 the computer and say oh, there is a stray right? 21 voltage. 21 A. Yes. 22 22 MR. DESAI: Objection, form. Q. And it doesn't know which is which, THE WITNESS: The indication on the 23 23 right? 24 screen and the alarms are an indicator of the 24 A. The, the system in the '864 patent Page 175 Page 177 presence of a stray or contact voltage 1 1 does not discriminate between the two. 2 anomaly which sometimes, which sometimes you 2 Q. Are you familiar with fast Fourier 3 get an indication that you cannot find an 3 transforms? 4 4 anomalous condition as a result of it. A. Yes. 5 5 (Kalokitis Exhibit Number 9 You know, anomalous, anomalous is, 6 6 I'm not sure anomalous is -- so, an elevated marked for identification.) 7 7 potential is a common cause of the electric BY MR. GOETTLE: 8 field. And that is what the system is 8 Q. The court reporter has just handed sensing and alarming and reacting to. 9 9 you what has been marked Kalokitis 9. 10 BY MR. GOETTLE: 10 A. Yes. Q. An elevated potential? 11 Q. U.S. Patent Number 8,482,274? 11 A. Yes. Stray or contact voltage which 12 12 is elevated potential. There is a source, a 13 13 Q. And naming you as the first inventor 14 system alarms to that source. 14 along with other inventors, right? 15 Q. The elevated potential is what is 15 A. Yes. 16 creating voltage, right? 16 O. In fact, the same inventors as A. The elevated potential. 17 17 Kalokitis 8, or 7, excuse me. 18 Q. Creates it? 18 19 A. The potential is voltage, elevated 19 Q. This is one of the patents that 20 20 voltage creates the signal. Power Survey is asserting against Narda and 21 Q. Okay. And so your invention, if I 21 Premier, right? 22 am hearing you right and at least the impression 22 A. I believe it is. 23 I think you are trying to give me, your invention 23 Q. Okay. I didn't realize the claim 24 can detect when an electric field is caused by 24 limitation is different in the '864 so that is

#### Page 178 Page 180 1 why I handed you this. Can you turn to 1 same answer for Claim 4. 2 2 Column 26. Were you the first to invent the 3 A. Column 26. 3 mobile apparatus that is claimed in Claim 4? Q. In the middle of the claims. 4 4 A. The mobile apparatus applying that 5 5 A. On 26, okay. feature in Claim 4, for sensing stray and contact 6 Q. Claim 4. 6 voltage anomalies, I think that is a yes. 7 7 A. Claim 4. I am reading Claim 4. Q. Okay. Now, just looking at Claim 4, 8 Okay. 8 were you the first to use a fast Fourier 9 Q. At the time of the invention, was it 9 transform at a rate that is a multiple of an 10 well known to use a fast Fourier transform at a 10 expected frequency of an electric field? 11 rate that is a multiple of the expected frequency 11 MR. DESAI: Objection, lacks 12 of an electric field? 12 foundation. 13 13 A. I don't believe it was well known THE WITNESS: First to use. Well, I 14 but I, I really can't date back to the origins of 14 can say since we were the first ones to build 15 this and what was the status of signal 15 a mobile apparatus for detecting stray and 16 processing, you know, dos and don'ts. 16 contact voltage, and that is a feature within 17 Q. So, I take it from that answer, 17 that, then we would be the first ones to use 18 then, you or your co-inventors invented this idea 18 that feature in a mobile apparatus for 19 of sampling at that rate? 19 detecting stray and contact voltage. 20 MR. DESAI: Objection, 20 I'm concluding that from reading 21 mischaracterizes testimony. You can answer. 21 this. I don't have an independent knowledge THE WITNESS: I, our specification 22 22 of, I don't, I don't know how else to answer 23 talks about applying a fast Fourier transform 23 that. 24 at a rate that is the multiple of the 24 BY MR. GOETTLE: Page 179 Page 181 1 expected frequency pertaining to electric 1 Q. You don't know? 2 2 fields. MR. DESAI: Objection, 3 So, that was part of our, part of 3 mischaracterizes testimony. Asked and 4 our specification. 4 answered. 5 5 BY MR. GOETTLE: THE WITNESS: I know that we use 6 Q. Okay. Was it inventive? 6 that technique as part of the mobile 7 A. Was it inventive? 7 apparatus we developed for stray and contact 8 8 Q. When you guys, when you started voltage. 9 9 doing that in the stray voltage detection system BY MR. GOETTLE: 10 that you developed for Con Ed? 10 Q. Okay. Do you have a belief one way MR. DESAI: Objection, lacks 11 or the other on whether the 8950/10 device copied 11 12 foundation. 12 Power Survey's device? Is a copy of Power 13 THE WITNESS: I think you are in a 13 Survey's device? 14 14 legal realm that I'm not. A. Do I believe the 8950/10 copies 15 BY MR. GOETTLE: 15 Power Survey's device. 16 Q. Were you the first to do it? Were 16 I believe the 8950/10 is well 17 17 you the first to think of it? described in the patents we have asserted. 18 A. I'm not sure how I would know that. 18 Q. Do you think Narda copied Power 19 Q. Well, do you know that if you were 19 Survey when it created the 8950/10? 20 the first to invent the mobile apparatus in 20 A. Do I personally think that there 21 claimed in Claim 1? 21 was, there was -- I believe the similarities are 22 A. Yes, we were the first to invent the 22 striking. 23 23 mobile apparatus claimed in Claim 1. Q. So, if we ever get in front of a 24 24 Q. So, I want to know if you have the jury and you are asked this question about

#### Page 182 Page 184 copying, that is going to be your answer? I in the 8950/10, would that change your belief 1 1 2 think the similarities are striking? 2 about copying? 3 3 A. I don't know what my answer would A. I don't know that I, that I 4 be. I would have to think about, I would have to 4 specified a belief about copying. 5 think about, you know, how one asserts, asserts 5 Q. Let's look at your Declaration. You 6 that, and under what conditions it is, it gets 6 might know better than me, oh, there it is. 7 7 asserted. You refer to a striking resemblance, 8 Q. Do you know what the name of the 8 let me see if I can find it. Paragraph 23? 9 sensor probe Narda uses in the 8950/10? Do you 9 A. Yes. 10 know what Narda calls it? 10 Q. And then at Exhibit H, you have 11 11 A. The, the, the core sensor that is side-by-side, it says Exhibit H but I think that 12 within the, in the 8950, I believe, yes, I 12 might be a typo. I think it is Exhibit F. Do 13 you have the side-by-side picture? 13 believe it is an EFA sensor. 14 Q. It's the EFA 300, that sound 14 A. Yes. familiar? 15 Q. And, maybe I read too much into 15 16 this. But when I read what you wrote in 16 A. It does. 17 Q. Do you know how old the EFA 300 is? 1.7 Paragraph 23, and look at the pictures, I think 18 A. It is quite old. 18 you are, the implication there is a belief on Q. And, do you have an understanding of 19 19 your part that Narda copied Power Survey. Is 20 20 whether the EFA 300 has been modified in any way that the wrong implication from what you have 21 when it was placed in the 8950/10-unit? 21 written here, what you are showing in Exhibit F? 22 A. I don't have knowledge of whether 22 A. I think the words are pretty clear. 23 the 89, the EFA 300 was modified when it was 23 There is a photo there of two systems that there 24 placed inside the 8950/10. 24 is a striking resemblance. Page 183 Page 185 1 Q. And when you say that the EFA 300 is 1 Q. But that is it? That is all -old, is it older than Power Survey's system? 2 A. Well, the, the, photo of the SVD 2 3 2000 and the design of that predates the 8950/10. 3 A. I don't know. Q. You don't know? 4 Q. So, but you don't believe that Narda 4 5 copied even though there is a striking 5 A. I don't know. 6 6 Q. You don't know whether the EFA 300 resemblance? 7 7 A. I'm not sure the use of my word copy was offered for sale and sold prior to 2004? 8 A. I believe, I believe it was sold 8 is relevant. I don't know. 9 9 prior to that. Q. Well, here is why I think it might 10 Q. How about prior to 2002? 10 be relevant. Because all over Power Survey's 11 briefing for a preliminary injunction they refer 11 A. I don't know. 12 12 O. How about prior to 2000? to Narda as a copycat throughout. 13 A. I don't know. 13 A. Okay. 14 O. How about 1998? 14 Q. And so I think Power Survey is 15 MR. DESAI: Objection, asked and 15 making it relevant. And, in support of those 16 statements about being a copycat, they refer to 16 answered. 17 17 BY MR. GOETTLE: your Declaration and this picture. 18 Q. You don't know? 18 A. Okay. A. If the I didn't know in 2002, I 19 19 Q. And so I think it would be fair for 20 20 us to be able to characterize your opinion for wouldn't know in 1998. 21 Q. If you learned that the EFA 300 had 21 the court on your belief on whether Narda copied. 22 been on sale for a number of years before Power 22 So that is why I'm asking you if the 23 23 implication from Paragraph 23 and the picture you Survey's, before Con Ed even approached Sarnoff, and it is not modified in any way when it is used 24 show in Exhibit F is to be, in your belief, that 24

	Page 186		Page 188
1	Narda copied.	1	Q. The sensor head, didn't copy Power
2	A. This is the basis for what you are,	2	Survey's sensor head. I thought we had agreement
3	what you have said is in the PI, that it is our	3	on that at least?
4	interpretation that it is copied, that it is a	4	A. Right.
5	copy.	5	Q. We-have agreement on that?
6	Q. So, it is your belief, then, that	6	A. The EFA 300 does, is not a copy of
7	Narda copied?	7	the, of the sensor head.
8	A. Yes.	8	Q. Okay. How about the DSP equipment?
9	Q. Even though the EFA device has been	9	Did Narda copy Power Survey's DSP equipment?
10	around for a long time prior to Power Survey's?	10	A. No.
11	A. EFA device is just a sensor head, no	11	Q. How about the user display system?
12	more.	12	Did Narda copy I'm sorry, just to make sure my
13	Q. So, it is an insignificant part of	13	question is clear for the record.
14	the system?	14	A. There are striking resemblances
15	MR. DESAI: Objection,	15	between the user display and our display.
16	mischaracterizes the testimony.	16	Q. Striking, I'm sorry?
17	THE WITNESS: It is a piece, it is a	17	
18	part.		<ul><li>A. Copying, copied functionality.</li><li>Q. Like what?</li></ul>
19	BY MR. GOETTLE:	18	
20	Q. Is it a significant piece or an	19	A. An alarm.
21	insignificant piece, or how would you	20	Q. We copied the fact that there is an
22	characterize it?	21	alarm?
23		22	A. There is a whole, there is probably
	MR. DESAI: Objection, form.	23	a number of features, but off the top of my head
24	THE WITNESS: I would characterize	24	without looking at the documentation it would be
	Page 187		Page 189
_			
1	it as a piece of the system. A system	1	hard to compare them. But the user display has a
1 2	it as a piece of the system. A system component.	1 2	hard to compare them. But the user display has a number of features that, you know, the
			The state of the s
2	component.	2	number of features that, you know, the
2 3	component. BY MR. GOETTLE:	2 3	implementation is much like the SVD 2000.
2 3 4	component. BY MR. GOETTLE: Q. No more significant than the bolts that hold the device onto the truck?	2 3 4	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?
2 3 4 5	component. BY MR. GOETTLE: Q. No more significant than the bolts	2 3 4 5	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.
2 3 4 5 6	component. BY MR. GOETTLE: Q. No more significant than the bolts that hold the device onto the truck? A. It is more significant than the bolts that hold the device on the truck.	2 3 4 5 6	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?
2 3 4 5 6 7 8	component. BY MR. GOETTLE: Q. No more significant than the bolts that hold the device onto the truck? A. It is more significant than the bolts that hold the device on the truck. Q. Okay. So what in the Power Survey	2 3 4 5 6 7	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.
2 3 4 5 6 7 8	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the	2 3 4 5 6 7 8 9	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?
2 3 4 5 6 7 8 9	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?	2 3 4 5 6 7 8 9	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?
2 3 4 5 6 7 8 9 10	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system	2 3 4 5 6 7 8 9 10	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you
2 3 4 5 6 7 8 9 10 11	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing	2 3 4 5 6 7 8 9 10 11	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.
2 3 4 5 6 7 8 9 10 11 12 13	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software,	2 3 4 5 6 7 8 9 10 11 12 13	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my
2 3 4 5 6 7 8 9 10 11 12 13 14	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod,	2 3 4 5 6 7 8 9 10 11 12 13 14	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all,
2 3 4 5 6 7 8 9 10 11 12 13 14 15	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that	2 3 4 5 6 7 8 9 10 11 12 13 14 15	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in Narda's system would be the EFA 300, right?  A. In the 8950 the sensor head is the	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?  A. Yes.  Q. Narda copied Power Survey in setting
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in Narda's system would be the EFA 300, right?  A. In the 8950 the sensor head is the EFA 300, yes.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?  A. Yes.  Q. Narda copied Power Survey in setting those thresholds?
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in Narda's system would be the EFA 300, right?  A. In the 8950 the sensor head is the EFA 300, yes.  Q. In the 8950/10.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?  A. Yes.  Q. Narda copied Power Survey in setting those thresholds?  A. In putting that functionality into a
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in Narda's system would be the EFA 300, right?  A. In the 8950 the sensor head is the EFA 300, yes.  Q. In the 8950/10.  A. Yes.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?  A. Yes.  Q. Narda copied Power Survey in setting those thresholds?  A. In putting that functionality into a stray and contact voltage detector.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	component.  BY MR. GOETTLE:  Q. No more significant than the bolts that hold the device onto the truck?  A. It is more significant than the bolts that hold the device on the truck.  Q. Okay. So what in the Power Survey system, what would you characterize as the significant pieces of the system?  A. The significant pieces of the system are the sensor head, the signal processing equipment, user displays, system software, computer, mounting system, mounting tripod, mounting arrangement. There may be more but that is a reasonable assessment.  Q. Okay. So sensor head that in Narda's system would be the EFA 300, right?  A. In the 8950 the sensor head is the EFA 300, yes.  Q. In the 8950/10.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	number of features that, you know, the implementation is much like the SVD 2000.  Q. So, the user display?  A. The user display is one, is one element.  Q. Okay. And the alarm is another one?  A. And the alarm is another one.  Q. Anything else that you can recall?  A. In just that component?  Q. Yes. In the user display, what you referred to as the user display system.  A. The thresholds, off the top of my head, you know, it would be hard to get them all, but.  Q. By a threshold you mean the threshold at which the alarm would go off?  A. Yes.  Q. Narda copied Power Survey in setting those thresholds?  A. In putting that functionality into a

#### Page 190 Page 192 extent your conversations were work product 1 A. In a stray and contact voltage 1 2 mobile detector, yes. 2 with your counsel present, you should not 3 Q. Narda copied that? That is what you 3 answer the question. If you can answer the 4 4 question without that, with that in mind, go are saying? 5 5 A. Yes. ahead. 6 Q. Mounting tripod I think I got that. 6 MR. GOETTLE: Are you claiming work 7 7 That is basically the picture that you have in product on what is in Dr. Fugate's 8 Figure 9. 8 Declaration? 9 A. That is correct. 9 MR. DESAI: Not on what is in 10 Q. Mounting arrangement is that 10 Fugate's Declaration. 11 different from the mounting tripod? MR. GOETTLE: Dr. Fugate stated that 11 12 A. Mounting it to a mobile platform. A 12 his opinion is based in part on his 13 motor vehicle is part of the mounting 13 conversation with the witness. 14 arrangement. 14 MR. DESAI: Feel free to ask 15 Q. Uh-huh. Does Power Survey's 15 Dr. Fugate about his conversations. 16 mounting tripod use the trailer hitch on the 16 MR. GOETTLE: I'm going to ask 17 truck? 17 Mr. Kalokitis about the conversations. 18 A. Yes. 18 MR. DESAI: Mr. Kalokitis has a Q. Is the trailer hitch on trucks 19 19 privilege. 20 usually in the front or the back? 20 BY MR. GOETTLE: 21 A. It is usually in the back. But it 21 Q. So, just so I understand, you are 22 can be in the front. 22 going to claim privilege even though Dr. Fugate 23 Q. You have, Power Survey has access to 23 has said he relied on what Mr. Kalokitis told him 24 an 8950/10 device, right? 24 in forming his opinions. Page 191 Page 193 MR. DESAI: Objection, lacks 1 1 MR. DESAI: I am not asserting 2 foundation. Go ahead. 2 privilege over anything that Dr. Fugate is 3 3 THE WITNESS: I have some of the going to talk about regarding his 4 4 conversations with Mr. Kalokitis. components. 5 5 BY MR. GOETTLE: I'm saying Mr. Kalokitis needs to 6 Q. And so, when we talked about, 6 keep in mind that for the conversations that 7 7 briefly about this earlier, but you have compared he had with attorneys present, he should not 8 the device to the claims of your patents, and 8 disclose those conversations. 9 formed a belief of infringement, right? 9 MR. GOETTLE: So let me narrow my 10 10 A. I have made some visual observations question. 11 on some of the components. I don't have drawings 11 BY MR. GOETTLE: 12 Q. What did you and Dr. Fugate discuss 12 or designs. with respect to your belief that the 8950/10 Q. Okay. But you, I think we already 13 13 established this, but you looked at the 8950/10 14 14 device infringes your patents. in some form, whether on documentation or with 15 A. My discussions had my attorneys 15 the device itself, compared it to your claims and 16 present at all times. So my interpretation is 16 17 17 formed the belief of infringement, right? that I can't discuss that. 18 18 MR. GOETTLE: Are you instructing Q. Okay. And then you discussed your 19 19 the witness not to answer my question. 20 20 belief with Mr. Fugate, Dr. Fugate? MR. DESAI: I am. 21 A. Yes. 21 MR. GOETTLE: Okay. Well, because 22 22 Q. What did you and Dr. Fugate talk I'm going to forget by the end of the day, we 23 23 are holding the deposition open, and we are about? 24 MR. DESAI: Mr. Kalokitis, to the 24 going to go to the court and we are going to

Page 194 Page 196 1 get the court to instruct that the witness 1 Q. Sorry? 2 answer these questions which are entirely 2 A. Yes, I see Paragraph 23. 3 appropriate and not calling for any work Q. If you wouldn't mind reading, I'm product or any privilege. 4 going to ask you if you agree. 4 5 5 MR. DESAI: It is work product. How A. After reviewing the patents in suit. 6 6 is it not work product? Our attorneys COURT REPORTER: I'm sorry, I have 7 7 working with the client to develop to take down what you say. 8 infringement positions. How is that not work 8 THE WITNESS: I'm sorry, I'm just 9 9 product? reading, moving my lips. 10 10 So, I see his definition of ordinary MR. GOETTLE: So, I'm going to hold skill in the art would include a Bachelor of 11 the deposition open. I'm not going to get 11 into an argument with you. To me this is an Science in Electrical Engineering or related 12 12 13 field and one on two years of experience in 13 argument that should not happen, because there is no way that this is protected. But 14 14 designing devices for measuring 15 I'm not going to get into it. We are going 15 electromagnetic phenomena such as those 16 associated with power systems. I see that is 16 to hold the dep open and then we will see 17 what the court says. 17 his definition or belief of a person of 18 BY MR. GOETTLE: 18 ordinary skill. 19 Q. Do you have an understanding of 19 Q. Do you agree? 20 Dr. Fugate's areas of expertise? 20 A. Yes. 21 Q. Electromagnetic phenomena, do you A. I do. 21 22 Q. Does he have as much experience as 22 see that phrase? 23 you in the field of stray voltage detection? 23 A. Yes. 24 24 What does that mean? A. I don't know. Q. Page 195 Page 197 1 Q. You didn't ask him? 1 A. Electric fields. 2 A. I, I don't know, if he has as much 2 Q. Does it include a magnetic field? 3 experience as me. I, I don't believe he has as A. It says electromagnetic, so the 3 much experience as I do in stray voltage 4 implication of that word electromagnetic is that 4 5 5 that magnetic may be included. detection. Q. Did you describe to Dr. Fugate the 6 Q. So, somebody could be a skilled 6 7 7 artisan in the field of your patents if they claims that you have a belief are infringed? 8 MR. DESAI: Again, I will just tell 8 design devices for measuring magnetic phenomena, 9 you there was no conversations between or magnetic fields? 9 10 A. It is possible, but not guaranteed. 10 Mr. Kalokitis and Dr. Fugate without attorneys present. 11 Q. Why do you say it is possible? 11 MR. GOETTLE: Whether attorneys are 12 A. Electromagnetics is a field of 12 science. And you could, you could, you could present or not does not matter if Dr. Fugate 13 13 14 have greater understandings in one direction of 14 relied on the conversations in forming his 15 electric field or magnetic field, or 15 opinion. It does not matter. 16 electromagnetic field. 16 MR. DESAI: You are not asking about 17 And, I think there is some 17 Dr. Fugate's opinions, you can ask Dr. Fugate 18 about his opinions. 18 distinctions that may be within those realms that 19 may or may not be relevant to the task at hand. 19 BY MR. GOETTLE: 20 Q. Are the problems associated with 20 Q. Can you turn in Kalokitis 2, which 21 is Dr. Fugate's Declaration? 21 detecting electric fields similar to the problems 22 associated with detecting magnetic fields? 22 A. First 10 pages? 23 23 Q. Yeah, Paragraph 23. A. They may or may not be. It depends 24 on the environment you are working in and the 24 A. Paragraph 23.

#### Page 198 Page 200 signals you are trying to detect and what is 1 O. I've got to write that down. So, 1 the demonstration that you saw in the 2002, 2003 2 around you. 2 3 3 time frame, that involved a handheld device only? Q. So, they might be or they might not 4 be? 4 A. Yes. 5 A. They may or may not be similar. It 5 Q. Did you witness any demonstrations 6 that used a cart on which the device was mounted 6 depends on the arena you are, you are working in. 7 7 MR. DESAI: Dan, we have been going that got pushed along a track? 8 8 for about an hour. A. I had, in one of these documents 9 there is photos of us testing something on a 9 MR. GOETTLE: Do you want a break? 10 THE WITNESS: Sure. 10 cart. Is that what you are referring to? THE VIDEOGRAPHER: The time is 3:15, 11 Q. I don't know. I didn't know it was 11 12 in -- no, it wasn't what I was referring to. 12 we are going off the record. 13 But, maybe it would be worth, I was kind of (Recess taken -- 3:15 p.m.) 13 14 (After recess -- 3:30 p.m.) 14 wishing I was referring to it. THE VIDEOGRAPHER: The time now is 15 But at least in terms of your 15 16 witnessing of the probe in the 2002, 2000 --3:30, we are back on the record. 16 17 17 BY MR. GOETTLE: A. I remember a handheld probe. I 18 Q. Okay. So, thinking about your, the 18 don't remember a mobile implementation of it. I 19 inventions in your patents, you have two of the remember something with a handle. 19 20 Q. Would mounting a probe on a cart and 20 patents, I can give you the third if you want it. 21 A. Okav. 21 wheeling it to detect electric fields, would that 22 be a mobile application? 22 Q. But what I would like to know is, 23 MR. DESAI: Objection, lacks 23 were you and your team the first to invent an 24 24 electric field probe? foundation. Page 201 Page 199 A. The first to invent an electric 1 THE WITNESS: It is difficult to say 1 2 without looking at the whole system. 2 field probe, no. 3 You know, if there is a system that 3 Q. Were you the first to think of using 4 is designed to be mobile and it is moving and 4 an electric field probe in a mobile environment? 5 A. We were the first to think of using 5 that is the way it works, perhaps. But, that 6 is, that is ambiguous. 6 a mobile electric field detection system for 7 7 BY MR. GOETTLE: finding stray and contact voltage. 8 So, depending upon what you mean by 8 O. So, if the system is on a cart and 9 being pushed and while it is being pushed it is 9 mobile environment and what you are trying to do 10 10 able to detect electric fields, that might be with it, it could mean a number of things. 11 nearby, that would be a mobile application? 11 Q. Well, but wasn't the Sarnoff, the 12 A. I guess depending upon your 12 pre-Jody Lane-Sarnoff project, didn't that have a 13 definition of mobility, it is one, it is one 13 portable which would mean mobile? 14 A. No, portable and mobile are not the 14 possibility. 15 15 Q. It is possible that in such an same. 16 arrangement it would be designed to operate in Q. They are not the same. 16 17 1.7 A. They are not the same. motion, right? 18 Q. What is the difference? 18 A. If someone designs a system to 19 operate while it is mounted to something that is 19 So, portable means that it is easily 20 transported from one spot to another. Portable 20 mobile, then I believe the definition, if they 21 phone. Well, that is a bad example. But, 21 have that design, is that they have a mobile 22 22 portable means you can carry it from one spot to system. Q. Okay. And did such mobile systems 23 23 another. Mobile means that it is designed to 24 to detect electric fields, no matter what the 24 operate in motion.

#### Page 202 Page 204 1 source, but did such mobile systems exist prior 1 Q. Do you know it now? 2 to your invention? 2 A. I do. 3 Q. Do you know whether, prior to your 3 A. I don't know. 4 invention, cranes used electric field sensors to 4 Q. Have you ever seen an electric field detectors that workers can wear on them to detect 5 detect power lines? 5 6 A. I don't know if I knew that then. 6 electric fields? 7 Q. Do you know it now? 7 A. Yes. 8 Q. Would you consider that a mobile 8 A. I do. 9 Q. Do you know that airplanes use 9 detector? 10 electric field sensors to detect power lines 10 A. No. 11 prior to your invention? 11 Q. That would only be a portable 12 A. I don't know if I knew that then. 12 detector? 13 Q. Do you know it now? 13 A. Yes. 14 A. I don't, I don't have much 14 Q. Were you the first to invent using a 15 information about airplanes, of that application 15 electric field probe on a vehicle? 16 regarding airplanes. A. We were the first to use an electric 16 17 I know, I know the, I don't know 17 field probe on a vehicle for the purpose of 18 the, I don't know what is used on airplanes. 18 finding stray and contact voltage anomalies. Q. How about boats, are you aware that 19 19 Q. But not the first to invent using an 20 boats, prior to your invention, used electric 20 electric field probe on a motor vehicle for other 21 field sensors? 21 purposes? 22 A. I know that there are many things 22 MR. DESAI: Objection, lacks 23 that use electric field sensors. 23 foundation. 24 So, if we go down a list of 24 THE WITNESS: I would expect that Page 203 Page 205 1 electric field probes have been around for a 1 everything that has ever used an electric field 2 long time, and they could appear in any 2 sensor, my iPhone probably has one. 3 3 Q. Well your iPhone is not prior art, number of locations. BY MR. GOETTLE: 4 4 though, right? 5 Q. Before you began your work when, 5 MR. DESAI: Objection, lacks after Con Ed came to Sarnoff and asked for help 6 6 foundation. 7 after Jody Lane, did you do any searching on what 7 THE WITNESS: I'm, I'm not sure of 8 was already out in the, in technology that you 8 the implication of prior art in this 9 9 might be able to use? paradigm. Everything is built out of 10 A. We had an experienced group and we, 10 something. 11 we relied on our resources to, to evaluate BY MR. GOETTLE: 11 12 approaches and, you know, this was our decision 12 Q. Were you the first to couple a 13 was to go down this path. 13 sensor probe to an electrically noninterfering 14 So, specific literature searches or 14 support frame mounted to a vehicle? 15 whatever, I don't recall. I don't recall what, 15 A. We were the first to combine a 16 you know, ten years ago what was all of the 16 vehicle, noninterfering support frame on a 17 factors that went into picking an approach. 17 vehicle to sense electric fields associated with 18 Q. Do you know, did helicopters use 18 stray and contact voltage. 19 electric field sensors to detect power lines 19 Q. But the rub there it is to sense 20 prior to your invention? 20 stray and contact voltage, right? That is your 21 A. Did I know that prior to my 21 point. You were the first to use a probe to 22 invention that helicopters used electric field 22 sense stray and contact voltage, and, therefore, 23 sensors to detect power lines? I don't know if I 23 of course, adding in --24 knew that then. 24 MR. DESAI: Objection,

	Page 206		Page 208
1	mischaracterizes testimony.	1	A. No.
2	BY MR. GOETTLE:	2	Q. Are you the first to digitize
3	Q adding in an electrically	3	signals corresponding to electric fields?
4	noninterfering support frame, of course you would	4	A. No.
5	be the first to do that as well, right?	5	Q. Are you the first to use an
6	MR. DESAI: Objection,	6	indicator to alert the presence of an electric
7	mischaracterizes testimony, mischaracterizes	7	field using an electric let me start over I
8	the document.	8	lost my thought.
9	BY MR. GOETTLE:	9	Are you the first to use an
		10	
10	Q. Your point is, you are the first to	1	indicator that alerts a user to the presence of
11	use a sensor probe to detect stray and contact	11	an electric field in conjunction with a electric
12	voltage, right?	12	field sensor probe?
13	MR. DESAI: Objection,	13	A. We are the first to use an electric,
14	mischaracterizes testimony. Mischaracterizes	14	a mobile electric field sensor to indicate an
15	the document. You can answer.	15	electric field associated with a stray or contact
16	THE WITNESS: We are the first to	16	voltage anomaly.
17	use a noninterfering mount on a mobile system	17	Q. Okay. But that is not my question.
18	to detect stray and contact voltage. It is a	18	A. Yes, I'm
19	combination of things.	19	Q. My question is are you the first to
20	BY MR. GOETTLE:	20	use an indicator that indicates the presence of
21	Q. Okay. I hear you it is a	21	an electric field.
22	combination of things. I would like you just to	22	A. I'm not the first to use an
23	answer the question I'm asking?	23	indicator that indicates an electric field.
24	A. Break it down, okay.	24	Q. You are, I think the term is senior
·	Daga 207	1	
	Page 207		Page 209
1.	Q. My question is are you the first to	1	Page 209 member of the IEEE?
1 2		1 2	_
	Q. My question is are you the first to	1	member of the IEEE?
2	Q. My question is are you the first to couple a sensor probe to an electrically	2	member of the IEEE?  A. Yes.
2	Q. My question is are you the first to couple a sensor probe to an electrically noninterfering support frame mounted to a vehicle?	2 3	member of the IEEE? A. Yes. Q. And what does senior member mean?
2 3 4	Q. My question is are you the first to couple a sensor probe to an electrically noninterfering support frame mounted to a vehicle?  MR. DESAI: Objection, asked and	2 3 4	member of the IEEE?  A. Yes. Q. And what does senior member mean? A. Senior member is a person which has made significant contributions to the engineering
2 3 4 5	Q. My question is are you the first to couple a sensor probe to an electrically noninterfering support frame mounted to a vehicle?  MR. DESAI: Objection, asked and answered. You can answer.	2 3 4 5	member of the IEEE?  A. Yes. Q. And what does senior member mean? A. Senior member is a person which has
2 3 4 5 6 7	Q. My question is are you the first to couple a sensor probe to an electrically noninterfering support frame mounted to a vehicle?  MR. DESAI: Objection, asked and answered. You can answer.  THE WITNESS: The first to use, I'm	2 3 4 5 6 7	member of the IEEE?  A. Yes. Q. And what does senior member mean? A. Senior member is a person which has made significant contributions to the engineering society. And has experience in engineering fields.
2 3 4 5 6 7 8	Q. My question is are you the first to couple a sensor probe to an electrically noninterfering support frame mounted to a vehicle?  MR. DESAI: Objection, asked and answered. You can answer.  THE WITNESS: The first to use, I'm sorry.	2 3 4 5 6	member of the IEEE?  A. Yes. Q. And what does senior member mean? A. Senior member is a person which has made significant contributions to the engineering society. And has experience in engineering fields. Q. I should have probably started with
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	Page 210		Page 212
1	echelon?	1	familiar with any of the IEEE standards?
2	A. No.	2	A. Yes.
3	Q. What were the contributions?	3	Q. What is an IEEE standard?
4	A. It is a, there is an application	4	A. A standard, typically, is a
5	process, a recommendation process, and a review	5	specification on how a system works, or on how a
6	process within the IEEE organization, and then	6	task may be carried out.
7	there is the award of the grade.	7	Q. And how are standards promulgated?
8	Q. Have you had other positions at the	8	A. There is a standards association, a
9	IEEE aside from senior member?	9	standards body, within the IEEE that has a.
10	A. I wouldn't characterize it as a	10	process for that.
11	position. It is	11	Q. So, would, is the, the goal for your
12	Q. I didn't know what the word to use,	12	working group to eventually be a standard?
13	title? Honor?	13	A. The goal of the working group is to
14	A. Well, it is a membership grade. It	14	produce a trial use guide.
15	is called a membership grade.	15	Q. That would be different from a
16	Q. Okay.	16	standard?
17	A. So you start out as a student	17	A. Yes.
18	member, become a general member. I am now a	18	Q. What is the difference?
19	senior member.	19	A. A standard is very rigorous and
20	Q. Okay. Have you also done work on	20	takes quite long to complete and that is it.
21	behalf of the IEEE as part of a working group?	21	Q. And the seven or eight years, that
22	A. I have participated in the working	22	sounds pretty rigorous to me.
23	group. I don't believe that work is	23	A. It is not done.
24	characterized as being on behalf of the IEEE.	24	Q. And when the standards, the IEEE
· to			
	Page 211		Page 213
1	Q. I see. But you participated in one	1	standards are promulgated are they publically
2	working group?	2	accessible?
3	A I have portionated in one working	1 ~	t topo or the state of
	A. I have participated in one working	3	A. IEEE Standards are publications of
4	group.	4	the IEEE. So, given that they are publications I
5	group.  Q. And what working group is that?	4 5	the IEEE. So, given that they are publications I expect there is access to them.
5 6	group.  Q. And what working group is that?  A. The P1695 working group.	4 5 6	the IEEE. So, given that they are publications I expect there is access to them.  Q. Would, we talked earlier about what
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	Page 214		Page 216
1	From AC Power Lines.	1	skilled artisans as of about that time, right?
2	A. Yes.	2	A. Yes.
3	Q. Have you ever seen this standard	3	Q. We talked earlier about the EFA 300,
4	before?	4	Narda's sensor probe?
5	A. I know its reference, but I don't	5	A. Yes.
6	believe I have read it in detail.	6	Q. Have you, have you seen any user
7	Q. I'm sorry, I missed the first part	7	manuals for the EFA 300?
8	of your answer?	8	A. Yes.
9	A. I know the reference. I recognize	9	Q. Would you have seen any of those
10	the 1994 reference. But I don't know that I	10	user manuals prior to your invention?
11	have, I don't recall reading it in detail.	11	A. I don't believe I would have seen an
12	Q. Do you recall if you had known of	12	EFA 300 user manual prior to my invention.
13	the existence of this standard at the time of	13	Q. It is kind of a stupid question
14	your invention?	14	because I think you testified earlier that you
15	A. I don't recall if I knew of the	15	actually didn't know about the EFA 300 prior to
16	existence of this standard.	16	your invention; is that right?
17	Q. You don't, I'm sorry, you don't	17	A. I did not know of the EFA 300
18	recall?	18	product prior to my invention.
19	A. I don't recall if in, at the time of	19	Q. Actually did you know of any EFA
20	the invention, if I, if I knew much about this	20	product prior to your invention?
21	standard.	21	A. Did I know of any Narda EFA series
22	Q. And you see on the front page where	22	products at the time of my invention, no.
23	it says Approved, December 13th, 1994.	23	Q: Did you know of any Wandel
24	A. I do.	24	Goltermann products prior to your invention?
	Page 215		Page 217
1	Q. Well, let me step back. These are	1	A. No.
2	the types of IEEE standards that we have been	2	Q. Had you heard of Narda prior to
3	talking about, right?	3	A. Yes.
4	A. Well, not exactly.	4	Q. Do you know why you had heard of
5	Q. Oh.	5	Narda?
6	A. We have been talking about two	6	A. Narda makes a lot of microwave
7	things. We have been talking about a trial use	7	components.
8	guide and we have been talking about IEEE	8	Q. I see. So it is part of your work
9	Standards.	9	as, in the microwave group, you would have used
10	Q. But the trial use guide I thought we	10	Narda components?
11	established was not going to be an IEEE Standard.	11	A. I saw Narda components in the
12	A. I don't, I don't believe it is, it	12	microwave industry.
13	is targeted as a standard.	13	Q. Okay. I think I am done but rather
14	Q. Okay. So just referring to IEEE	14	than sit here, do you think I could have five
15	Standards.	15	minutes just so I could check my notes and
16	A. Yes.	16	MR. DESAI: Sure.
17	Q. This is a typical IEEE Standard,	17	MS. ZIBAS: I have a few questions.
18	correct?	18	THE VIDEOGRAPHER: The time now is
19	A. Yes.	19	3:58, we are going off the record.
20	Q. Okay. And, that Approved	20	(Recess taken 3:58 p.m.)
21	December 13th, 1994, is an indication that this	21	(After recess 4:06 p.m.)
22	was promulgated in 1994 or soon after, right?	22	THE VIDEOGRAPHER: The time now is
		23	4:06. We are back on the record.
23	A. Yes.	1 23	
23 24	Q. And would have been available to	24	BY MR. GOETTLE:

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			-
1 1	Q. Earlier today we talked a lot about	1 .	about the facts surrounding your discussions.
2	the inventors on the various patent applications	2	You should not get into the content of your
3	and whether you had any communications with them	3	discussions with counsel.
4	since you have left Sarnoff.	4	THE WITNESS: Okay. I am, I
5	Are you aware of anybody else	5	certainly spoke to Clement Berard. I likely
6	talking to any of the inventors with respect to	6	talked to him about this application.
7	this lawsuit?	7	BY MR. GOETTLE:
8	A. I'm not aware of anyone else talking	8	Q. Okay. That is not my question. My
9	to the inventors with respect to this lawsuit.	9	question is, did you speak to Mr. Berard about
10	Q. I'm looking at Power Survey's	10	the inventors, who should be listed as an
11	memorandum brief, oh, go ahead.	11	inventor on here?
12	A. There was a, there was a point where	12	MR. DESAI: Same instruction
13	I think someone had to contact them about one of	13	Mr. Kalokitis, it is okay to talk about
14	these, some application or something.	14	facts, you should not talk about content.
15	Q. Do you recall	15	THE WITNESS: I don't recall.
16	A. Maybe through the prosecuting, I	16	BY MR. GOETTLE:
17	don't know. But I think there might have been	17	Q. You don't recall. How about for
18	some	18	Kalokitis 4, which is the '470 provisional patent
19	Q. Do you recall any more details about	19	application.
20	that?	20	A. I am sorry, Exhibit 4. Just give me
21	A. I think there was, there was a	21	a second here.
22	communication with the, with Ray Moser's group.	22	Q. And I guess I should
23	Q. But do you recall anything about it?	23	A. I don't recall discussions about
24	A. I think it was, it was a part of a	24	that. It was something that we, we did from time
	Page 219		0.01
	rage 219		Page 221
1		1	_
1 2	continuation or some ongoing process.	1 2	to time. But, I do not recall specifically
2	continuation or some ongoing process.  Q. Do you have any understanding of how	2	to time. But, I do not recall specifically having discussions on that.
2	continuation or some ongoing process.  Q. Do you have any understanding of how the inventors that are named on each of the	2 3	to time. But, I do not recall specifically having discussions on that.  Q. How about Kalokitis 5, which is
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2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	continuation or some ongoing process.  Q. Do you have any understanding of how the inventors that are named on each of the various patents was decided? Who would be named and who would not be named?  A. The patent counsels of the, at the particular times interviewed people, spoke to people, and worked through that chain.  Q. Were you involved in any of those conversations?  A. I was interviewed as part of those conversations.  Q. Did such an interview occur with respect to Kalokitis 3, which was the earliest provisional patent application?  A. Clement Berard, Clement Berard is the attorney that signed on this. And I remember meeting Clement, so, there was a good chance that there were discussions on that.  Q. You remember talking to Mr. Berard about inventorship?  A. I remember talking to Mr. Berard.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	to time. But, I do not recall specifically having discussions on that.  Q. How about Kalokitis 5, which is provisional patent application that ends with 168.  A. I don't recall those discussions. Q. Kalokitis 6, same question for Kalokitis 6, the '054 patent. A. I don't recall those discussions. I, like I said, I believe we have had discussions. But, the content and all of that, I don't recall. I don't recall content. Q. And, then, the three asserted patents all have the same inventorship on them. Do you recall any discussions of inventorship for the three asserted patents? And I can give you the third one if you would like. A. The three asserted patents I, I believe I had discussions with counsel on those. Q. About inventorship? MR. DESAI: Mr. Kalokitis, same instruction. You can talk about the facts

#### Page 224 Page 222 1 patents and provisionals in front of me and 1 But if you can't answer the question 2 I, I don't have a good sense of the exact 2 without disclosing attorney/client privileged 3 information you should not answer the 3 tracking through these documents. BY MR. GOETTLE: 4 4 question. 5 5 Q. Can you pull out Kalokitis 3? THE WITNESS: So, I, I can't speak 6 about my conversations with my attorney. 6 A. Right here. 7 BY MR. GOETTLE: 7 O. Okay. When was Kalokitis 3 filed? 8 8 Q. You are going to follow counsel's A. December 23, 2004. 9 instruction? 9 Q. And you wrote in your Declaration 10 A. Yes. 10 that this was implementing or describing, excuse 11 Q. Was that conversation before the me, describing your invention, right? You wrote 11 12 patent applications, related to the patents in it in your Declaration. Do you want me to point 12 13 suits were filed? 13. that out to you? 14 A. I don't recall. 14 It is on Page 4, Paragraph 10. Q. It could have been after? 15 15 A. Yes. This is the provisional 16 MR. DESAI: Asked and answered. 16 application mentioned in Paragraph 10. 17 THE WITNESS: I don't recall. 17 Q. Okay. In Power Survey's brief, they 18 MR. DESAI: Objection. 18 write, "Kalokitis led a team of engineers at 19 BY MR. GOETTLE: 19 Sarnoff, conceived a novel system for mobile 20 Q. You can't recall one way or the 20 stray voltage detection in late 2005, and built a 21 other? prototype stray voltage detection system." 21 22 A. I can't recall one way or the other. 22 So, did you, did you understand what 23 Q. In Power Survey's brief to the I just read? 23 24 court, when it moved for the preliminary 24 A. I believe so. Page 223 Page 225 Q. So, that sentence says that you 1 injunction, it filed a memorandum brief with the 1 conceived a novel system for mobile voltage 2 court in support of the motion for the 2 3 detection in late 2005. And I want to know if 3 preliminary injunction. Are you familiar with 4 you agree with that statement? 4 5 5 A. I would have to see the document you MR. DESAI: I'm going to object to 6 the extent it mischaracterizes the document. 6 are referring to. 7 Q. Okay. And the only reason, I only 7 I don't know, because I don't have it in 8 8 want to ask you one concise point on one page. front of me. 9 And because it is labeled confidential, I'm going 9 MR. GOETTLE: I'll be happy to give 10 you a copy. 10 to read it to you. If you really need to see it 11 MR. DESAI: And, just to be clear, 11 may be what I will do is pull the page out. 12 it is marked confidential because it contains But I think that this statement 12 13 our confidential information not yours. 13 contradicts what you told me earlier. I believe 14 you told me earlier that the patent applications 14 So there is really no reason he 15 can't see it. Didn't --15 that you filed, the, in fact you can look at it if you want. But the first patent application, 16 MR. GOETTLE: I just didn't want it 16 on the record and be, I'm fine, can I hand it the provisional, Kalokitis 3, which was filed in 17 17 18 to the witness? Any objection? And we won't 18 2004, disclosed the invention. 19 A. Disclosed which invention. 19 mark it. Would that be all right? 20 Q. Your invention that Power Survey has 20 MR. DESAI: Yes, that is fine, that 21 is fine. 21 sued Narda and Premier over. 22 MR. DESAI: Objection, 22 BY MR. GOETTLE: 23 Q. I should have asked earlier. So, I 23 mischaracterizes testimony. 24 was just reading from, so, just so the record is 24 THE WITNESS: I have a number of

	Page 226		Page 228
1	clear I have just handed you a copy of the brief.	1	A. That would be when my team conceived
2	We did not mark it because it is marked	2	a novel stray voltage detection system.
3	confidential.	3	Q. Were you part of the conception?
4	I read from you, I read to you from	4	A. Yes.
5	Page 2.	5	Q. While we are on it, just because you
6	A. I'm sorry.	6	have the page in front of you.
7	Q. That is okay.	7	A. Sure.
8	A. Page 2.	8	Q. Look up above. There is a reference
9	Q. I know I have thrown a lot of paper	9	to energized sections of sidewalks in the, under
10	at you.	10	the first paragraph under the Heading B.
11	A. Okay.	11	A. Which page, please?
12	Q. Page 2, the last full paragraph,	12	Q. I'm sorry, Page 2.
13	last sentence of that paragraph.	13	A. Page 2. I'm sorry, so, say again.
14	A. Okay, I see the sentence.	14	Q. Under the heading, the first
15	Q. Okay. Is that statement correct?	15	A. B?
16	A. There was an ongoing development,	16	Q. Yes, under B.
17	and a number of provisionals and patents that	17	A. Okay. Yes.
18	came out of it.	18	Q. The second to the last sentence ends
19	So, to, 2005, I don't think the	19	with "energized sections of sidewalks."
20	characterization of late 2005 is necessarily	20	A. Okay. Such as energized sections of
21	accurate.	21	sidewalks. Is that the sentence you are
22	Q. I'm sorry, you don't think?	22	referring to?
23	A. I don't know that that is	23	Q. Yes, sir. Are sidewalks conductive?
24	necessarily accurate because there were, there	24	A. Yes.
		<u> </u>	
	Page 227		Page 229
1	were many innovations along the way. It was a	1	Q. The concrete is conductive?
2	progression of development that started around	2	A. Yes.
3	the time of Jody Lane's death and progressed	3	Q. No kidding. So, when I am walking
4	through the end of, the end of '06, early '07.	4	down the street now and I am thinking about not
5		ł	_
	So, there is a progression through	5	walking over those metal doors that hide the
6	this.	6	walking over those metal doors that hide the stairs I actually should be thinking about not
	this. Q. I understand. But, so, do you think	l	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?
6 7 8	this.  Q. I understand. But, so, do you think this statement is incorrect?	6 7 8	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of
6 7 8 9	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement	6 7 8 9	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.
6 7 8 9 10	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.	6 7 8 9 10	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.
6 7 8 9 10 11	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is	6 7 8 9 10 11	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?
6 7 8 9 10 11 12	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?	6 7 8 9 10 11 12	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.
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6 7 8 9 10 11 12 13 14 15	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?  A. I could make a statement that there were novel things invented in '04 and in '05 and in '06.	6 7 8 9 10 11 12 13 14 15	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.  A. Do you like your dog?  Q. The kids like the dog.  A. Do you like your kids?
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6 7 8 9 10 11 12 13 14 15 16 17 18	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?  A. I could make a statement that there were novel things invented in '04 and in '05 and in '06.  Q. When did you conceive a novel system for mobile stray detection?  A. In December, 2004, there are, there are mobile system descriptors in this, in this.	6 7 8 9 10 11 12 13 14 15 16 17 18	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.  A. Do you like your dog?  Q. The kids like the dog.  A. Do you like your kids?  Q. Yes, I like the kids.  A. Yes, so make sure their dog is safe.  MR. GOETTLE: Okay. I have no further questions, thank you for your time.
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6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?  A. I could make a statement that there were novel things invented in '04 and in '05 and in '06.  Q. When did you conceive a novel system for mobile stray detection?  A. In December, 2004, there are, there are mobile system descriptors in this, in this.  So, I believe 2006, 2004 is the first filing associated with that.  Q. So, that would have been when you	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.  A. Do you like your dog?  Q. The kids like the dog.  A. Do you like your kids?  Q. Yes, I like the kids.  A. Yes, so make sure their dog is safe.  MR. GOETTLE: Okay. I have no further questions, thank you for your time.  EXAMINATION BY COUNSEL FOR PREMIER UTILITY SERVICE  BY MS. ZIBAS:
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?  A. I could make a statement that there were novel things invented in '04 and in '05 and in '06.  Q. When did you conceive a novel system for mobile stray detection?  A. In December, 2004, there are, there are mobile system descriptors in this, in this.  So, I believe 2006, 2004 is the first filing associated with that.  Q. So, that would have been when you conceived a novel system for mobile stray voltage	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.  A. Do you like your dog?  Q. The kids like the dog.  A. Do you like your kids?  Q. Yes, I like the kids.  A. Yes, so make sure their dog is safe.  MR. GOETTLE: Okay. I have no further questions, thank you for your time.  EXAMINATION BY COUNSEL FOR PREMIER UTILITY SERVICE  BY MS. ZIBAS:  Q. I only have a few questions. I
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	this.  Q. I understand. But, so, do you think this statement is incorrect?  A. I don't think that statement embodies everything that went on.  Q. Do you agree that the statement is incorrect or you disagree?  A. I could make a statement that there were novel things invented in '04 and in '05 and in '06.  Q. When did you conceive a novel system for mobile stray detection?  A. In December, 2004, there are, there are mobile system descriptors in this, in this.  So, I believe 2006, 2004 is the first filing associated with that.  Q. So, that would have been when you	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	walking over those metal doors that hide the stairs I actually should be thinking about not walking on the sidewalk at all?  A. Well, if you have a good set of rubber shows on you are okay.  Q. Okay.  A. Do you have a dog?  Q. Yes.  A. Do you like your dog?  Q. The kids like the dog.  A. Do you like your kids?  Q. Yes, I like the kids.  A. Yes, so make sure their dog is safe.  MR. GOETTLE: Okay. I have no further questions, thank you for your time.  EXAMINATION BY COUNSEL FOR PREMIER UTILITY SERVICE  BY MS. ZIBAS:

#### Page 232 Page 230 And I'm just going to ask you a few had to be conducted as part of the RFP process? 1 1 2 2 A. I'm not sure I understand the follow up questions from your testimony today. 3 So what I will try to do is I will 3 question. 4 try to describe the area that we are talking 4 Q. In any of the RFPs that were 5 5 submitted by Power Survey, and let's just look at about, because I know that we have gone through 6 tremendous amount of material. 6 2000 ---7 A. Okay. 7 A. Throughout time. 8 8 Q. I'm going back to the point where we Q. Well, look at 2013. 9 were talking about your presentations to 9 A. Okay. 10 10 Q. Was it ever a requirement that a legislators. 11 11 And, we talked about Connie Hughes survey be conducted? 12 is no longer with Power Survey. Do you recall 12 A. A mobile test survey for contact and 13 13 stray voltage? 14 A. I recall that I, that, I, I give 14 Q. Yes. 15 A. Was it ever a requirement that that 15 presentations to -- was your question about 16 16 regulators. be done in our proposals. Q. Regulators or legislators? 17 Q. Correct. 17 18 A. I gave presentations to regulators 18 A. So, you are asking did the RFP ask 19 and legislators, yes. 19 for a mobile stray voltage detection? 20 Q. Or, if they called it a mobile field 20 Q. Now is it correct that you had 21 assessment, or a pilot program, whatever they 21 indicated that Power Survey is no longer doing 22 presentations to regulators and legislators; is 22 happen to call it? 23 23 A. Yes, RFPs, we have received RFPs that correct? A. I'm not travelling to regulatory 24 that asked for a mobile stray or contact voltage 24 Page 231 Page 233 symposia and providing presentations anymore. 1 1 detection program. 2 Q. Is Power Survey still presenting? 2 Q. And did Power Survey participate in 3 3 the, in those surveys for mobile field assessment A. Presenting? Q. To regulators and legislators? 4 as part of the RFP in 2013? 4 5 5 A. Power Survey will, occasionally, A. So, we call our work out in the 6 6 field when we go looking for stray voltage a submit a letter or something to those entities, 7 7 but, not providing presentations. survey. 8 Q. Uh-huh. 8 Q. So, do you know if in 2013 up 9 through March, 2014, if Power Survey gave any 9 A. Are you asking, have we written 10 proposals to do our work, which is mobile 10 presentations to any state utility commissions or 11 11 any other commissions? detecting? 12 12 A. I don't recall any specific Q. No. Were you required as part of 13 13 your bid, because you said that when you presentations. 14 Q. Okay. All right. Now I'm going to 14 responded to the RFP, that you have to put in the 15 bid. As part of your bid, did Power Survey 15 go to the topic of RFPs now. 16 I know that you had testified that 16 participate in any mobile field assessments? 17 you only work on some of the RFPs, you are not 17 A. Were we required to participate in 18 mobile field assessments as part of a bid. 18 familiar with all of them? 19 A. That's correct. 19 We were not required to do, to scan 20 Q. I understand that, because sometimes 20 utility's territories as part of a bid 21 they use your template, correct? requirement. 21 22 A. Correct. 22 Q. Do you know if Power Survey failed 23 23 to show up for a side-by-side survey with Premier Q. Are you, are you aware if, in any of the RFPs, if it was a requirement that a survey 24 in 2013 as part of a bid? 24

	Page 234		Page 236
1	MR. DESAI: Objection, lack of	1	EFA 300 sensor in the truck bed which was
2	foundation. You can answer.	2	ineffective and inaccurate because of
3	THE WITNESS: I know that Power	3	interference from the truck's metal."
4	Survey rejected the prospect of participating	4	Can you provide to me the basis of
5	in a ill-defined test by one of the customers.	5	your statement that it is ineffective and
6	BY MS. ZIBAS:	6	inaccurate?
7	Q. Do you remember which customer that	7	A. My technical expertise.
8	was?	8	Q. So, what's the technical, besides in
9	A. Rhode Island.	9	general, your technical expertise, did you
10	Q. Was it Rochester?	10	actually perform a test? Did you examine the
11	A. Rhode Island.	11	product? What did you do to conclude ineffective
12	Q. What about Rochester Gas and	12	and inaccurate?
13	Electric?	13	A. I reviewed the photograph, and my
14	A. Rochester Gas and Electric had a	14	understanding of the operation of electric field
15	number of RFPs come our way, and the requirements	15	sensors, coupled with that, indicates to me that
16	varied depending upon what particular moment you	16	that would be an ineffective and inaccurate
17	got one.	17	method for sensing stray and contact voltage.
18	Q. Now, you had said that Power Survey	18	Q. And, why do you believe that?
19	rejected it because the test was ill-defined.	19	A. The fundamental operation of a
20	What do you mean by ill-defined?	20	electric field sensor relies on a gradient and
21	A. The notion of a test was mentioned,	21	electric field. Associating the bed of the truck
22	and we requested that we get a test plan, and to	22	and the metal therein has a deleterious effect on
23	understand the criteria for acceptance, and the	23	the field that may be sensed at that position.
24	scientific basis for the methods. And we were	24	Q. Have you ever examined the EFA 300
	Page 235		Page 237
1	not given those materials.	1	sensor? Physically examined it?
2	Q. Have you, has Power Survey ever	2	A. Yes.
3	participated in a bid where you did have a	3	Q. Now, if you could look at
4	well-defined test that you were, and you	4	Paragraph 20, on that same Page 6 in your
5	participated?	5	Declaration.
6	A. No.	6	A. Yes.
7	Q. And was Power Survey successful in	7	Q. You say, "Mr. Voightsberger
8	receiving the bid when they didn't participate in	8	eventually started working for Premier Utility
9	the survey?	9	Service where he again took up marketing and
10	A. You know, I don't know the final	10	developing a mobile stray voltage testing
11	details of all of the bid packages. I, as I said	11	system."
12	before, if I get a piece over here and the rest	12	Do you know when Mr. Voightsberger
13	of it.	13	started working for Premier?
14	Q. Who usually handles the bid packages	14	A. I do not.
15	at Power Survey?	15	Q. Do you have a general idea if it was
16	A. Tom Catanese.	16	one year ago or two years ago?
17	Q. Okay. Now, if you would look at the	17	A. I have a sense that it might be
18	Declaration which has been marked as Kalokitis 1.	18	longer than that. But, I don't know the
19	A. Yes.	19	specifics.
20	Q. And turn to Page 6, Paragraph 18.	20	Q. What is your sense of when he
21	A. Yes.	21	started with Premier?
22	Q. Looking towards the bottom of that	22	A. Maybe the 2011 to 2012 time frame,
22	Paragraph 18, the sentence that says,	23	to 2000 I'm thinking somewhere between '10 and
23	ranging in vo, and contained and only s,	1	
23	"Mr. Voightsberger's PQT system, however, had the	24	'12, but, I don't know the specifics.

#### Page 240 Page 238 this letter. But what are the activities? 1 Q. And in that same paragraph in that 1 2 sentence I read, you indicate that 2 A. Mr. Voightsberger was marketing 3 3 Mr. Voightsberger was developing a mobile stray stray voltage detection services for the company. 4 Q. And when you refer to Power Survey's 4 voltage testing system. 5 patent protection, are you referring to the 5 What was your basis that he was 6 developing a mobile stray voltage testing system? 6 patents in suit, or just the patents and the 7 A. I believe there is a letter 7 applications that are listed in the letter in 8 somewhere where he described his activities. I 8 Exhibit G? 9 believe it is somewhere in here. 9 MR. DESAI: Objection, form, lacks 10 10 foundation. Q. So, the basis, is some document that 11 THE WITNESS: I didn't write the 11 is attached to your Declaration, correct? But no 12 letter. Ray Moser wrote the letter. And I 12 first-hand knowledge? 13 A. Of what he was doing, I only have, I 13 relied on his expertise as an attorney to 14 have seen letters, you know, a number of letters 14 cover my needs. 15 that he has written. 15 BY MS. ZIBAS: 16 Some of them are here, I don't know 16 Q. Do you see any of the patents that 17 17 are in suit in the letter listed, attached to if all of them are here. But that is my sense of 18 where he has documented his activities. 18 Exhibit G, or marked as Exhibit G to your 19 Q. And what type of mobile stray 19 Declaration? 20 20 A. Do I see the patents in suit. voltage testing system do you believe that he has 21 21 developed? Is it the Narda system or something Q. Yes, are the patents in suit in this else? 22 lawsuit, are any of them listed in this letter, 22 23 A. I think you would have to ask 23 dated June 4th, 2012, to Peter Arbour at 24 24 Willbros. Mr. Voightsberger what he has invented or built Page 239 Page 241 1 A. So the only patents I see are the 1 or designed. 'O81, the '642 and the '054 in this suit, I'm 2 2 Q. All right. So, when you put this in 3 this Declaration you were just relying on some 3 sorry, in this letter. 4 e-mails or something that you read, correct? Q. Okay. 4 5 5 A. I don't see anything, I don't see A. Things he has written. 6 6 Q. Okay. And, the second sentence in those three as being asserted in this suit. 7 Q. In the letter? 7 Paragraph 20 refers to a letter that was sent to 8 A. I'm sorry, in the letter. 8 Willbros about Mr. Voightsberger's activities and 9 how they affect Power Survey's patent protection. 9 Q. Okay. I have no further questions. 10 10 A. Okay. Can you describe to me what the 11 THE VIDEOGRAPHER: The time now is 11 activities are that protected Power Survey's 12 4:39, and this deposition has concluded. 12 patent protection. 13 A. Let me find the exhibits that is 13 (Whereupon, signature not having been 14 waived, the deposition concluded at 4:39 p.m.) listed here. 14 15 15 Q. Yes, it refers to Exhibit G. 16 A. Yes, okay, this is G, okay. So, 16 17 17 okay, now I see the reference. 18 18 Please ask the question again. 19 Q. In your Declaration you indicate 19 20 that a letter was sent by, Power Survey sent a 20 21 21 letter to Willbros about Mr. Voightsberger's 22 activities and how they affect Power Survey's 22 23 23 patent protection. 24 So I understand that it refers to 24

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ERRATA	1 2 3	CERTIFICATE OF COURT REPORTER UNITED STATES OF AMERICA ) DISTRICT OF COLUMBIA )
LINE CHANGE	4 5	I, LORI J. GOODIN, the reporter before whom the foregoing deposition was taken, do
	7	hereby certify that the witness whose testimony appears in the foregoing deposition was sworn by
SON:	9	me; that the testimony of said witness was taken by me in machine shorthand and thereafter
SON:	11	transcribed by computer-aided transcription; that said deposition is a true record of the testimony
	13	given by said witness; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition
	15	was taken; and, further, that I am not a relative or employee of any attorney or counsel employed
	17	by the parties hereto, or financially or otherwise interested in the outcome of this
	19	action.
	21	LORI J. GOODIN  Notary Public in and for the
	23 24	District of Columbia My Commission expires May 14, 2016
EKNOWLEDGMENT OF DEPONENT  I,		
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